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## ABSTRACT

This report presents the results of research conducted to determine the current state of the art of robotics/automated systems technician (RAST) training offered in the United States. Section I discusses the RAST curriculum project, of which this state-of-the-art review is a part, and offers a RAST job description. Section II describes the information sources for the project survey--public and private institutions providing technician training--and the types of information sought. The presentation of data is addressed in section III. A table provides a state-by-state listing that identifies the number of schools offering RAST training. Section IV presents a summary of the results of the survey which indicates that: 56 institutions currently provide RAST training programs; 114 schools offer robotics courses as electives; currently, 159 instructors teach robotics and 5,472 students are studying to become robotics technicians in the two-year associate degree and certificate programs; 33 texts are currently being used in training robotics technicians; and 27 other competency-based modular texts applicable to portions of RAST training are available. Appendixes, amounting to approximately four-fifths of the report, include raw survey data, a bibliography, and a chart of colleges and universities offering robotics training. (YLB)

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## AN ASSESSMENT OF THE STATE OF THE ART OF CURRICULUM MATERIALS AND A STATUS ASSESSMENT OF TRAINING PROGRAMS FOR ROBOTICS/AUTOMATED SYSTEMS TECHNICIANS

Project No. 90120420000  
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## TASK ANALYSIS AND DESCRIPTIONS OF REQUIRED JOB COMPETENCIES OF ROBOTICS/AUTOMATED SYSTEMS TECHNICIANS

May 1984

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U. S. DEPARTMENT OF EDUCATION

OFFICE OF VOCATIONAL AND ADULT EDUCATION

ROBOTICS/AUTOMATED SYSTEMS TECHNICIAN TRAINING IN THE USA  
A State-of-the-Art Report  
ABSTRACT

This report presents the results of research conducted to determine the current state of the art of Robotics/Automated Systems Technician (RAST) training offered in the United States; that is, it identifies institutions, instructors, texts and number of students currently involved in training technicians. The research is based on the presumption that postsecondary public and private institutions, employer-sponsored retraining/upgrading or consultants and vendors can provide adequate preparation of technicians so that they can competently install and maintain robots/automated systems.

For the purposes of this study, "State of the Art" is understood to be a description of current robotics/automated systems technician training in public and private schools including the text material being used, and the quantity, education and experience of instructors.

The Center for Occupational Research and Development and Robotics International of the Society of Manufacturing Engineers conducted a survey to determine the State-of-the-Art of Robotics/Automated Systems Technician Training. The results of this survey, included in Section IV, indicate that 56 postsecondary institutions currently provide robotics technician training programs. Additionally there are 114 schools that offer robotics courses as electives. There are currently 159 instructors (76 with Masters Degrees and 7 with PhDs) teaching robotics and 5472 students studying to become robotics technicians in the two-year associate degree and certificate programs. Thirty-three texts were identified as currently being used in training robotics technicians; however, only one of these is known to be competency based and modular in format. There are also 27 other competency-based, modular texts available which are applicable to portions of Robotics/Automated Systems Technician training.

## SECTION I

### INTRODUCTION

#### A. BACKGROUND

Our country's future in the world marketplace of production depends upon the ability of its industries to economically produce high-quality goods. To continue as economical producers, industries will utilize robots and automated systems. This utilization will also require adequately trained technicians to install, operate and maintain these modern devices and assemblies. Effective Robotics/Automated Systems Technician (RAST) training programs include instruction in a variety of fundamental subjects including mechanics, electricity, heat transfer, and fluidics. The programs also include systems courses that are adaptable to incorporate new developments in robotics technologies.

Robots are a key factor in the ability of the United States to maintain a competitive position in the world marketplace. Robots perform many tasks other than the classical--hot, heavy and hazardous jobs. These include assembly (both large and small parts), parts sorting, palletizing, parts stacking (in an orderly manner), mail delivery, quality control, etcetera.

There are, at the present time, approximately 4,000 robots working in factories; by 1990 an estimated 150,000 robots will be installed and working (University of Michigan/Society of Manufacturing Engineers Delphi forecast<sup>1</sup>). Technicians will be required to install, set up, calibrate, operate, service, and maintain these robots and the automated systems where they are used. The technicians must be competent in hydraulic, mechanical, electric, thermal, and pneumatic systems, programmable controllers, sensing systems, safety, vision systems, and controller communications techniques and systems.

Based on a study by Donald Smith<sup>2</sup> for the University of Michigan and the Society of Manufacturing Engineers, there will be a need for 11,000 to 15,000

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<sup>1</sup>Smith, Donald N. and Wilson, Richard C. Industrial Robots - A Delphi Forecast of Markets and Technology. Society of Manufacturing Engineers, 1982.

<sup>2</sup>Ibid.

robotics technicians by 1990. To provide for this projected need, comprehensive, broad-based robotics technician training programs will have to be established to retrain existing workers and to educate new technicians in a manner that ensures their employability.

The level of training required for technicians who install and maintain robots is considerably beyond that of a high school education. A high school student in a modern vo-tech program would not have sufficient time to adequately study the required high school subjects and also learn the material required to become a competent RAST. Therefore, the curriculum and supporting module outlines to be developed during this project will focus on prebaccalaureate, two-year "High-Tech" robotics/automated system programs. However, articulation into these programs from vocational high schools is encouraged.

#### B. PROJECT DESCRIPTION/PURPOSE

In August 1983 the United States Department of Education awarded a contract to the Center for Occupational Research and Development (CORD). The project has four major tasks: (1) determine the current state of the art of robotics technician training, (2) analyze tasks performed by robotics technicians; (3) design a model curriculum for training robotics technicians; and (4) develop complete module outlines for new courses in the curriculum.

To assist in accomplishing these tasks, CORD established a Panel of Experts (POE). The panel membership represents robotics manufacturers and users, educators and organized labor (see Appendix A for names). The panel also provides input to and validates, by passing judgment on their value, the tasks required of robotics technicians.

The CORD staff compiled a list of tasks from several sources. The robotics technicians task list was mailed to and reviewed by panel members. Their suggestions have been incorporated. The revised task list has been resubmitted for their validation. Once the tasks are validated as requirements for robotics technicians, they will be used as a guide in determining the training requirements. The POE will continue to review and comment on the curriculum and module outlines as these are being developed.

One part of the RAST curriculum project is to determine the current state of the art (SOA) of RAST training available in the USA. For clarification, the SOA is defined to be an assessment of the current status of robotics and automated systems training programs that exist in public and private institutions throughout the country. This assessment should answer several questions: (1) What training exists and where is it located? (2) What is the extent of training at the different sites? (3) What are the resources (instructors, texts, etc.) available to students desiring robotics training? CORD has assimilated data from Robotics International/Society of Manufacturing Engineers and from state vocational education directors to answer these questions. The raw data are Appendix B.

#### C. ROBOTICS VS ROBOTICS/AUTOMATED SYSTEMS

The first Panel of Experts meeting resulted in a recommendation to change the project title from "Robotics" to "Robotics/Automated Systems." The rationale for the change is given below. Robots are assemblies of electrical, pneumatic, electronic, and/or hydraulic manipulators and mechanisms. These components are connected in a manner, and controlled by a programmable controller, to perform specific tasks. In modern robots the programmable controller can be reprogrammed periodically, allowing the robot to perform a variety of tasks. Most robots are elements of production systems which creates an automated system. Another type of automated system is an assembly of manipulators and mechanisms, similar to those in robots, which are controlled by a microprocessor to accomplish several tasks rapidly. Since both robots and automated systems are assemblies of similar manipulators and mechanisms and robots work as part of an automated system, it is natural to include automated systems in the title of this project.

#### D. STANDARDS OF COMPARISON

One of the first steps in developing a curriculum to train technicians is to define what is expected of that person during employment. A Robotics/Automated Systems Technician job description agreed upon by the Panel of Experts is:

Robotics/Automated Systems Technicians are technical specialists with broad-based electromechanical skills who are familiar with electronic, mechanical and hydraulic/pneumatic devices. They are usually specialists in computer-aided design, robotics, computer numerical control, or processing equipment and can set up automatic machines which work together as part of a total automated system. In their area of specialization, they can install, set up, troubleshoot, integrate, program, modify, test, operate and repair systems and components. They are field-service, installation or service technicians. They will work either under the supervision of an engineer, as a member of a team or as a supervisor of other technicians.

In order to attain the skills and knowledge described above, a technician will require a "broad-based" education which is based upon the principles of several interrelated technologies. Therefore, the curriculum being developed as part of this contract will include fundamental courses from many disciplines: mechanics, electricity, hydraulics/pneumatics, heating and cooling, mathematics and computer literacy. At the conclusion of the two-year program, a graduate will be expected to understand the basic principles and their application to real devices. Most, if not all, of these fundamentals are interwoven in the principles of robotics and automated systems.

To become an effective technician, the student must recognize systems that function as a unit. The student laboratories will include the assembly of individual components into functional systems. It is only by starting with, and understanding, components (building blocks) that the system operation can really be understood. The laboratories will be organized so that several systems work together, thereby allowing the student to observe how the robotics/automated systems work together in a typical manufacturing cell.

Appropriate courses will enable the student to become familiar with computers, how they function and how they can be made to work with each other. Most modern industrial processes have become highly automated. Repetitive tasks in machining, assembly, painting and testing are accomplished by automated machines or industrial robots. These processes, machines, and robots are controlled by computers. Technicians, working with automated equipment or data-management systems, must be able to use both the software and hardware of computers and microprocessors. The development, installation,

calibration, troubleshooting, and repair of most computerized equipment require the combination of knowledge and skills found in computer programming and digital electronics.

A solid background in applied physics is fundamental to a technician's training. Applied physics should be taught during the entire first year with at least half of the physics instruction being spent in laboratories observing and measuring physical phenomena on real-world equipment--and not just using sterile physics equipment. One of the curriculums, United Technical Concepts (UTC)\*, includes the appropriate sequencing of applied physics which are the broad technical base upon which the curriculum is developed. The various topics, or concepts, in UTC are presented in a unique manner, stressing the unification of basic physical concepts, such as force and resistance across the usually traditional boundaries of mechanics, electricity, heat, and fluidics. Subsequently, device-oriented courses build upon the practical application of the physics principles presented in the UTC labs.

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\*Information about UTC Physics can be obtained from CORD, 601C Lake Air Drive, Waco, TX 76710.

## SECTION II

### SOURCES AND DATA COLLECTION

#### A. SOURCES OF TRAINING

A wide variety of institutions offer robotics training today. The State-of-the-Art study examines all major public and private sources of training including two-year technical schools or junior colleges which issue certificates or associate degrees to students completing their training. There are private schools that provide full two-year robotics training. Programs other than two-year, in both public and private sectors, offer robotics courses as electives supporting other major programs. Many institutions provide continuing education classes and/or seminars addressing the use of robots. These seminars are more for familiarizing students with robots than for training technicians.

Some robot manufacturers provide training for their customers' personnel. Such vendor training may be on very different levels, ranging from training technicians and operators to training engineers in the use and programming of specific robots. The technician training provided is of interest to this project. The curriculum for vendor training, however, is directed at one or, at best, a few, specific model(s) of robot(s) produced by a particular manufacturer. The training does not include the fundamentals needed to make the technician versatile and able to work on a wide variety of robots and systems. In all likelihood, the technicians would not be able to work on and maintain more than one or two models of robots.

Manufacturers and users of robots often provide training for their employees. Like vendor training, user training is specific to the relatively few models in use at the local facility. Again, training would not include fundamentals and technical principles, and thus would have a limited usefulness for the technician.

This study investigates and summarizes technician training in public and private institutions, not manufacturer- or customer-supplied training. Analysis of data shows a breakdown according to the type of program offered and the resources required to support it.

## B. INFORMATION SOURCES

As an efficient method of obtaining data, and to avoid redundancy in conducting the survey of schools, CORD has worked cooperatively with outside organizations including Robotics International of the Society of Manufacturing Engineers (RI/SME) and the State Directors of Vocational Education. Through these organizations, public institutions were surveyed to obtain data required to complete the forms used in Appendix B.

The director of vocational education in each State was asked to supply the names of all schools that provide, or are planning to provide, robotics training. Subsequently, these lists were compared to the list of schools responding to the RI/SME survey; discrepancies were resolved with a telephone call. The CORD staff called the robotics contact person at those institutions which had not responded to the RI/SME survey to obtain data required. The complete data is presented in raw form in Appendix B. Neither the development of the survey instrument or the survey itself was part of the project activities.

## C. INFORMATION SOUGHT

The following information was determined to be used in examining robotics/automated systems technician education state of the art:

- Name of school and address.
- Contact person and phone number.
- Program type.
- Number and qualification of instructors.
- Number of students enrolled and graduated.
- Texts being used.

Institutions offer training in many formats. The formats of highest interest for this project are two-year certificate, diploma and Associate of Applied Science programs. In many cases, the difference in terminology between AAS (Associate of Applied Sciences), diploma, and certificate may not be indicative of differences in program content or level. The designation of specific terminology (AAS, certificate, etc.) may be a decision of a local school, district, state or some combination of these agencies. Programs of interest in this survey include those in robotics/automated systems, those

that offer robot courses as an optional portion of another program, and curricula with robotics courses available as electives at the student's option. Appendix b differentiates between these types of programs, both those that are independent programs in robotics training, and those that offer optional courses in robotics as a part of another program. Programs that offer a robotics curriculum are expected to provide the most comprehensive training, including an appropriate applied physics course as a base. If robotics is available as an option in another specialty area, the robotics training, probably will not be comprehensive. It is also highly doubtful that such training would be broad-based. In schools where robotics electives are offered, training needed by robotics technicians will be minimal. There is almost a certainty that training would not be broad-based.

A credible program should be staffed by teachers who are experienced in industry and teaching. Industry experience is viewed as very important in order to provide an instructor with a thorough up-to-date understanding of the requirements of industry and what is expected of technicians. It must be expected, however, that some schools will have to make compromises in teacher qualifications because of salary constraints of the institution.

Texts are evaluated for their appropriateness for technician training. Many texts are written for use in four-year baccalaureate programs. Several others are texts which provide general information. Very few texts exist for comprehensive competency-based technician training. Those texts which may be useful for technician training are listed in the "List of Texts in Use" (Appendix C).

## SECTION III

### DATA PRESENTATION

Table I (Page 12) is a summary of program and student enrollment/graduate information supplied by institutions that responded to the RI/SME survey and the CORD telephone follow-up. (The raw data for this table is included in Appendix B.) It is a state-by-state listing that identifies the number of schools that offer robotics/automated systems technician training. This tabulation indicates the following:

1. 56 schools offer two-year postsecondary programs in robotics.
  - 568 students have graduated from robotics programs.
  - 5472 students are currently enrolled in robotics training (3988 of these students are in Michigan and Ohio).
2. 114 schools offer robotics training as part of another specialty.
  - 1214 students have graduated after studying robotics as part of another specialty.
  - 4568 students are enrolled in courses which will introduce them to robotics/automated systems.

Appendix B also includes data concerning the history of robotics programs being offered. This information indicates:

- 2 schools began offering robotics programs before 1982.
- 40 schools began offering robotics programs between 1982-1983.
- 14 schools are beginning robotics programs in 1984.
- 17 schools are currently developing programs.

A third item defined in Appendix B is the number, education and experience level of instructors involved in teaching robotics courses. This data shows that there are 159 instructors currently teaching robotics courses. Of these 159 instructors, 7 have PhD degrees and 76 hold Masters degrees.

Thirty-three texts, listed in Appendix C, were identified by schools as being used to train students in robotics. It should be noted that several survey returns did not include the name of texts being used at those institutions. Also included in Appendix C are 1) a list of the 27 competency-

TABLE 1

## SUMMARY OF ROBOTICS/AUTOMATED SYSTEM TRAINING BY STATE

| STATE          | ROBOTICS/AUTOMATED SYSTEMS            |           |                       | ROBOTICS/AUTOMATED SYSTEMS<br>AS PART OF ANOTHER SPECIALTY |           |                       |
|----------------|---------------------------------------|-----------|-----------------------|------------------------------------------------------------|-----------|-----------------------|
|                | TWO-YEAR<br>POSTSECONDARY<br>PROGRAMS | GRADUATES | CURRENT<br>ENROLLMENT | TWO-YEAR<br>POSTSECONDARY<br>PROGRAMS                      | GRADUATES | CURRENT<br>ENROLLMENT |
| Alabama        | 0                                     | 0         | 0                     | 7                                                          | 30        | 224                   |
| Arizona        | 0                                     | 0         | 0                     | 1                                                          | 0         | 0                     |
| Arkansas       | 1                                     | 0         | 4                     | 3                                                          | 12        | 216                   |
| California     | 4                                     | 0         | 69                    | 3                                                          | 0         | 129                   |
| Colorado       | 0                                     | 0         | 30                    | 0                                                          | 0         | 0                     |
| Delaware       | 0                                     | 0         | 10                    | 0                                                          | 0         | 0                     |
| Washington, DC | 0                                     | 0         | 0                     | 1                                                          | 0         | 25                    |
| Florida        | 1                                     | 0         | 52                    | 6                                                          | 45        | 259                   |
| Georgia        | 0                                     | 0         | 0                     | 2                                                          | 0         | 58                    |
| Idaho          | 0                                     | 0         | 0                     | 1                                                          | 0         | 17                    |
| Illinois       | 5                                     | 0         | 212                   | 7                                                          | 112       | 195                   |
| Indiana        | 3                                     | 0         | 223                   | 7                                                          | 60        | 475                   |
| Iowa           | 2                                     | 0         | 65                    | 3                                                          | 9         | 62                    |
| Kansas         | 0                                     | 0         | 0                     | 3                                                          | 15        | 31                    |
| Kentucky       | 0                                     | 0         | 0                     | 1                                                          | 0         | 29                    |
| Maryland       | 2                                     | 0         | 49                    | 1                                                          | 0         | 0                     |
| Massachusetts  | 0                                     | 0         | 0                     | 3                                                          | 0         | 85                    |
| Michigan       | 10                                    | 500       | 2745                  | 5                                                          | 200       | 560                   |
| Minnesota      | 2                                     | 0         | 64                    | 3                                                          | 100       | 353                   |
| Mississippi    | 0                                     | 0         | 24                    | 0                                                          | 0         | 0                     |
| Missouri       | 2                                     | 0         | 75                    | 1                                                          | 0         | 120                   |
| Nebraska       | 0                                     | 0         | 0                     | 2                                                          | 25        | 62                    |
| New Jersey     | 0                                     | 0         | 0                     | 4                                                          | 0         | 152                   |
| New Mexico     | 0                                     | 0         | 0                     | 1                                                          | 160       | 120                   |
| New York       | 2                                     | 0         | 65                    | 7                                                          | 160       | 134                   |
| North Carolina | 0                                     | 0         | 0                     | 7                                                          | 91        | 170                   |
| North Dakota   | 1                                     | 0         | 14                    | 0                                                          | 0         | 0                     |
| Ohio           | 8                                     | 0         | 1243                  | 6                                                          | 73        | 254                   |
| Oklahoma       | 1                                     | 0         | 54                    | 3                                                          | 80        | 80                    |
| Oregon         | 1                                     | 0         | 18                    | 1                                                          | 0         | 10                    |
| Pennsylvania   | 2                                     | 0         | 90                    | 1                                                          | 0         | 18                    |
| South Carolina | 1                                     | 0         | 30                    | 1                                                          | 0         | 45                    |
| South Dakota   | 0                                     | 0         | 0                     | 1                                                          | 0         | 132                   |
| Tennessee      | 2                                     | 0         | 151                   | 4                                                          | 0         | 94                    |
| Texas          | 1                                     | 0         | 40                    | 5                                                          | 0         | 84                    |
| Utah           | 0                                     | 0         | 0                     | 1                                                          | 0         | 30                    |
| Virginia       | 0                                     | 0         | 0                     | 1                                                          | 2         | 22                    |
| Washington     | 2                                     | 8         | 18                    | 2                                                          | 0         | 44                    |
| Wisconsin      | 3                                     | 60        | 127                   | 8                                                          | 40        | 219                   |
| Wyoming        | 0                                     | 0         | 0                     | 1                                                          | 0         | 10                    |
| Total          | 56                                    | 568       | 5472                  | 114                                                        | 1214      | 4518                  |

based modular texts available from the Center for Occupational Research and Development and 2) a list of book titles, copied from Books in Print, which were not identified as being used in classrooms.

In addition to the two-year postsecondary programs already described, 80 colleges and universities identified their involvement in robotics training. These schools are identified, along with the fields of study in which they offer robotics courses, in Appendix D.

## SECTION IV

### SUMMARY/CONCLUSIONS

#### A. SUMMARY OF DATA

The survey requested 3200 institutions to supply data describing their programs. Of these, 376 replies were received in time to be evaluated for this report. The final analysis, Table I, indicates that there are 56 two-year programs, with a total enrollment of 5472 students, currently providing robotics training. These institutions--that is, those most likely to provide comprehensive broad-based technician training--represent 11% of institutions surveyed.

The curricula offered by these institutions have various names including Robotics Technician, Robotics/Automated Manufacturing, and Computer-Integrated Manufacturing. The curricula for these programs have been developed with one goal--training a person to be a technician who can install, operate, calibrate, troubleshoot and repair robots and automated production systems. Other data presented indicates that 114 schools offer programs with robotics/automated systems courses as options or electives in other specialty areas. As identified in Appendix B, schools with elective robotics courses offer them as part of Electronics, Computers, Industrial Technology, Electromechanical Technology, and Industrial Electronics (this list is not all-inclusive) curricula. Since those curricula have been developed to train students in areas other than robotics, it is logical to assume that the students will not receive the depth or breadth of exposure to robotics and automated systems required of Robotics/Automated Systems Technicians.

Table II is included for information only. It shows the growth of institutions offering robotics training. The institutions responding to the survey indicated 159 instructors involved in classes where robots or robotics systems are studied. Of these, only 7 have PhD degrees while another 76 hold Masters degrees. The remainder, as indicated in Appendix B, have BS or AAS degrees, or experience with robots as their credentials. The number of instructors--159--does not include instructors of support courses or courses

offered by other departments (other than departments with robotics courses) as these persons support many areas of specialization--not just robotics.

The institutions contacted during the telephone follow-up indicated that quite often trade-offs of salary and benefits necessitate hiring instructors with less education/experience than is really desirable. This means that the schools--to a large extent--do not have fixed minimum requirements for these instructors.

TABLE II. SCHOOLS WITH TWO-YEAR POSTSECONDARY ROBOTICS PROGRAMS

| Year Started              | Number |
|---------------------------|--------|
| Pre-1982                  | 2      |
| 1982                      | 6      |
| 1983                      | 34     |
| 1984                      | 14     |
| Currently being developed | 17     |

#### B. CONCLUSIONS--THE STATE OF THE ART

The survey was sent to 3200 institutions; replies were received from 376 of these indicating 56 institutions have RAST programs in place and 17 more are developing new programs. There may not be a need for many more new programs. This fact is even more evident with the number of students currently enrolled--5472--in RAST programs. Allowing for attrition and predictable delays in graduation beyond the scheduled two years, it is estimated that approximately 2200 students will be graduating each year. The current projected enrollment levels at schools with existing and planned programs may be sufficient to meet the projected need of 11,000 to 15,000 technicians in this field by 1990.

Most institutions that responded to the RI/SME survey did not identify text materials being used. Appendix C, "List of Texts in Use," is a listing of those texts that were identified. The only texts that have been identified as competency based are those from Heath/Zenith.

Based upon the texts in use and informal information supplied during the telephone follow-up to the survey, very few programs in place today are truly competency based, nor are many broad based (training RASTs to be versatile and able to install, set up, operate, maintain, program, troubleshoot,

repair, test and calibrate any robot or automated system that their future employer may elect to purchase). The need, both immediate and future, will be for institutions to install broad-based programs or to increase the breadth of existing programs to include training on electrical, pneumatic and hydraulic robots and automated systems. The curriculum for RASTs must be based upon the mastery of technical principles, enabling students to learn the interrelationship of mechanical, electrical, thermal and fluidic fundamentals, and to learn new technologies as they emerge.

The model curriculum to be developed as part of this project will be available as a guide to help institutions establish new programs or improve existing programs. New course outlines will provide guidance as new modules are written in support of these new improved programs.

TASK ANALYSIS AND DESCRIPTIONS OF REQUIRED JOB COMPETENCIES  
OF ROBOTICS/AUTOMATED SYSTEMS TECHNICIANS

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Mr. Bill Matheny, Manager  
Training and Development  
Texas Instruments, Inc.  
P. O. Box 6015  
Dallas, TX 75222  
214/995-6295

Mr. Jeffrey S. Noss  
Operations Manager, Robotics Division  
Nordson Corporation  
555 Jackson Street  
Amhurst, OH 44001  
216/988-9411

Mr. Lee Ordning, Manufacturing Technology  
Applications Associate  
Manufacturing Staff, Robotics Center  
Ford Motor Company  
15100 Mercantile Drive  
Dearborn, MI 48120  
313/594-2280

Mr. Jack Patrick, Director  
Mr. Ray Powell (Advisory Member)  
Augusta Area Technical School  
3116 Deans Bridge Road  
Augusta, GA 30906  
404/798-4343

Mr. James A. Rehg, Director  
Center for Robotics  
Piedmont Technical College  
Drawer 1467  
Greenwood, SC 29648  
803/223-8357

Mr. Pat J. Rosato, Director  
Technical Training and Publications  
Unimation, Inc.  
Shelter Rock Lane  
Danbury, CT 06810  
203/744-1800

Mr. Fred Sitkins  
Professor of Mechanical Engineering  
Kohrman Hall  
Western Michigan University  
Kalamazoo, MI 49008  
616/383-4992

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| ALABAMA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                       | PROGRAM TITLE             | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       | REMARKS |                 |
|------------------------------------------------------------------------------------------------------|---------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|---------|-----------------|
|                                                                                                      |                           | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT |         | PRIVATE SCHOOL  |
| Hobson State Tech Coll<br>PO Box 489<br>Thomasville 36784<br>Wm A Scott, Jr<br>205/636-9278          | Industrial<br>Electronics | X                 |         |             |              | X           | 2                            | BS              | 10+             | F                 | 30                | 4                | 84  | 27                    |                       | X       |                 |
| Jefferson St Jr Coll<br>Pinson Valley Pkwy<br>2601 Carson Rd<br>Birmingham 35215-3098<br>Howard King |                           | X                 |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       |         | Being developed |
| Snead St Jr Coll<br>PO Drawer D, Boaz 35957<br>Ray Hartline<br>205/593-5120                          | Robotics                  |                   |         | 16<br>wk    | X            |             | 1                            | AS              | 10+             | F                 | 20                | 4                | 84  | 20                    |                       | X       | One course      |
| John M Patterson St Tech<br>Coll, Troy Hwy<br>Montgomery 36109<br>Harold L Coomes<br>205/288-1080    | Electronics               |                   | X       |             |              | X           | 2                            | MS              | 10+             | F                 | 5                 | 25               | 84  | 8                     |                       | X       |                 |
| George Corley Wallace<br>St Comm Coll<br>PO Drawer 1046<br>Selma 36701<br>Jim Myers<br>205/875-2634  | Electronics<br>Technology | X                 |         |             |              | X           | 1                            | 0-5             | F               | 5                 | to<br>25          | 84               | 10  |                       |                       | X       |                 |
| Bessemer St Tech Coll<br>PO Box 308<br>Bessemer 35021<br>Rich Raymond<br>205/428-6391                | Industrial<br>Electronics | X                 |         |             |              | X           | 1                            | AS              | 5-<br>10        | F                 | 10                | 2                | 83  |                       |                       | X       |                 |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| ALABAMA (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                     | PROGRAM TITLE             | DEGREE OFFERED    |         |             |              | PROGRAM     |                 | INSTRUCTORS |                 |                    |                   | CONTACT<br>HOURS  |         | INSTITUTIONAL<br>DATA |                 |                       |                | REMARKS      |
|------------------------------------------------------------------------------------------------|---------------------------|-------------------|---------|-------------|--------------|-------------|-----------------|-------------|-----------------|--------------------|-------------------|-------------------|---------|-----------------------|-----------------|-----------------------|----------------|--------------|
|                                                                                                |                           | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER | SPECIALTY   | NUMBER REQUIRED | EDUCATION REQUIRED | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB                   | YR. FIRST OFFER | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL |              |
| J F Drake St Tech Coll<br>3421 Meridian<br>North Huntsville<br>L B Kitchen<br>205/539-8161     | Electronics               | X                 |         |             |              | X           | 4               | BS          | 10+             | F                  | 5                 | 10                | 83      | 3                     |                 | X                     |                |              |
| Wallace St Comm Coll<br>PO Box 250<br>Hanceville 35077<br>Mr. Rayburn Williams<br>205/352-6403 | Industrial<br>Electronics | X                 |         |             |              | X           | 2               | BS<br>MS    | 10+             | F                  | 1                 | 5                 | 83      | 176                   |                 | X                     |                | 30 graduates |
|                                                                                                |                           |                   |         |             |              |             |                 |             |                 |                    |                   |                   |         |                       |                 |                       |                |              |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| ARIZONA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                  | PROGRAM TITLE                       | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       | REMARKS |                 |
|-------------------------------------------------------------------------------------------------|-------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|---------|-----------------|
|                                                                                                 |                                     | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT |         | PRIVATE SCHOOL  |
| Central Arizona Coll<br>Coolidge 85228<br>John Palmer<br>602/723-4141                           | None                                |                   |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       | X       | Being developed |
| Maricopa Tech Comm Coll<br>108 N 40th<br>Phoenix 85034<br>M Sperstad<br>602/275-8500            | Electronics                         | X                 |         |             |              | X           | 1                            | BS              | 10+             |                   | 4                 | 0                | 83  | 0                     |                       | X       |                 |
| Scottsdale Comm Coll<br>9000 E Chaparral Rd<br>Scottsdale 85253<br>David Weaver<br>602/941-0999 | Electronics/<br>Microproces-<br>sor | X                 |         |             |              | X           |                              |                 |                 |                   |                   |                  |     |                       |                       | X       | Being developed |
|                                                                                                 |                                     |                   |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       |         |                 |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| ARKANSAS<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                | PROGRAM TITLE                             | DEGREE OFFERED    |         |             |              |             |                              | PROGRAM  | INSTRUCTORS     |                 |                   |                  | CONTACT<br>HOURS |          | INSTITUTIONAL<br>DATA |                       |                                      | REMARKS |
|------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|----------|-----------------|-----------------|-------------------|------------------|------------------|----------|-----------------------|-----------------------|--------------------------------------|---------|
|                                                                                                |                                           | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY |          | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL / PART TIME | CLASSES          | LAB      | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL                       |         |
| So Arkansas Univ,<br>Tech Branch<br>PO Box 3048<br>Camden 71701<br>Howard King<br>501/574-4539 | Robotics &<br>Manufacturing<br>Automation |                   |         | X*          | X            |             | 3                            | MS       | 10+             | F               | 4                 | 3                | 83               | 4        |                       | X                     | *3-year certificate                  |         |
| Westark Comm Coll<br>PO Box 3649<br>Fort Smith 72913<br>Larry Fox<br>501/785-4241, ext 481     | Industrial<br>Control &<br>Robotics       | X                 |         |             |              | X           | 2                            | BS<br>MS | 10+             | F               | 3                 | 3                | 82               | 125<br>* |                       | X                     | *Electronics Program<br>12 graduates |         |
| Northwest VoTech School<br>PO Drawer A<br>Springdale 72342<br>Harold Harris<br>501/751-8824    | Industrial<br>Electronics                 | X                 |         |             |              | X           | 2                            | BS       | 5-<br>10        | F               | 4                 | 4                | 83               | 20       |                       | X                     |                                      |         |
| Twin Lakes VoTech School<br>PO Box 1496<br>Harrison 72601<br>Joe Johnson<br>501/741-6175       | Electro-<br>mechanical<br>Technology      |                   | X       |             |              | X           | 4                            | AS<br>BS | 10+             |                 | 4                 | 4+               | 82               | 71       |                       | X                     |                                      |         |
|                                                                                                |                                           |                   |         |             |              |             |                              |          |                 |                 |                   |                  |                  |          |                       |                       |                                      |         |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| CALIFORNIA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                      | PROGRAM TITLE                              | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   | CONTACT<br>HOURS  |         | INSTITUTIONAL<br>DATA |                 |                       | REMARKS |                 |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|---------|-----------------------|-----------------|-----------------------|---------|-----------------|
|                                                                                                        |                                            | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB                   | YR. FIRST OFFER | CURRENT<br>ENROLLMENT |         | PRIVATE SCHOOL  |
| Cerritos Coll<br>11110 E Alondra Blvd<br>Norwalk 90650<br>Anthony Austin<br>213/860-2451               | Automated<br>Manufacturing                 | X                 |         | X           |              |             | 3                            | MS              | 10+             |                   | 3                 | 3       | 84                    | 21              |                       | X       |                 |
| San Bernardino Valley<br>Coll. 701 S Mt Vernon<br>San Bernardino 92410<br>Raymond Cook<br>714/888-6511 | Robotics                                   |                   |         | X           |              |             | 3                            | BS<br>MS        | 10+             |                   | 4                 | 3       |                       |                 |                       | X       |                 |
| Ohlone Coll<br>43000 Mission Blvd<br>Fremont 94539<br>Curt Huska                                       | Electrical<br>Engineering                  | X                 |         |             |              | X           | 2                            | BS              | 0-5             | F                 | 3                 | 3       | 84                    | 24              |                       | X       |                 |
| LA Valley Coll<br>5800 Fulton Av<br>Van Nuys 91401<br>William Lavoie<br>213/980-0431                   | Engineering                                | X                 |         |             |              | X           |                              |                 |                 |                   |                   |         |                       |                 |                       | X       | Being developed |
| Long Beach City Coll<br>4901 E Carson<br>Long Beach 90808<br>Dr C P Johnson<br>213/420-4301            | Robotics<br>Technology                     | X                 |         |             | X            |             | 3                            | MS<br>PhD       |                 | F                 | 6                 | 3       | 83                    | 28              |                       | X       |                 |
| Glendale Comm Coll<br>1500 N Verdugo Rd<br>Glendale 91208<br>Donald Ney<br>818/240-1000                | Electronics/<br>Computer Tech,<br>Robotics | X                 |         | X           |              | X           | 1                            | KS              | 5-<br>10        | F                 | 3                 | 3       | 83                    | 20              |                       | X       |                 |
|                                                                                                        |                                            |                   |         |             |              |             |                              |                 |                 |                   |                   |         |                       |                 |                       |         |                 |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| CALIFORNIA (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                     | PROGRAM TITLE                                         | DEGREE OFFERED    |         |             |              |             |                              |                 | PROGRAM         |                   | INSTRUCTORS       |         |     | CONTACT<br>HOURS |                       | INSTITUTIONAL<br>DATA |              |                 | REMARKS |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|---------|-----|------------------|-----------------------|-----------------------|--------------|-----------------|---------|
|                                                                                                   |                                                       | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB | YR. FIRST OFFER  | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL        | PUBLIC INST. |                 |         |
| Palomar College<br>1605 W Mission Rd, Unit<br>San Marros 92069<br>Dr Joan Stepsis<br>619/744-8110 | Automated<br>Process<br>Control Main-<br>tenance Tech |                   | X       |             |              | X           | 1                            | AS              | 0-5             | F                 | 13                | 13½     | 84  | 25               |                       | X                     |              |                 |         |
| Laney Coll<br>900 Faldon St<br>Oakland 94607<br>Marcos Contreras<br>415/834-5574                  | Applied<br>Technology                                 | X                 |         |             |              | X           | 3                            | AS<br>BS<br>MS  | 10+             | F                 | 3                 | 3       | 83  | 80               |                       | X                     |              |                 |         |
| Los Angeles Harbor Coll<br>1111 Figuerda Pl<br>Wilmington 90744<br>Prof J Harter<br>213/518-1000  | Electrome-<br>chanical Tech.<br>Robotics<br>Option    |                   |         |             |              |             |                              |                 |                 |                   |                   |         |     |                  |                       | X                     |              | Being developed |         |
|                                                                                                   |                                                       |                   |         |             |              |             |                              |                 |                 |                   |                   |         |     |                  |                       |                       |              |                 |         |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| COLORADO<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                                          | PROGRAM TITLE                       | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS                  |                 |                 |                   | CONTACT<br>HOURS  |         | INSTITUTIONAL<br>DATA |                 |                       |                | REMARKS      |                 |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|---------|-----------------------|-----------------|-----------------------|----------------|--------------|-----------------|
|                                                                                                                                          |                                     | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB                   | YR. FIRST OFFER | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |                 |
| Comm Coll of Denver<br>Red Rocks Science &<br>Technology<br>12600 W 6th Ave<br>Golden 80401<br>P E Perkins<br>L E Deaver<br>303/988-6160 | Flexible<br>Automation-<br>Robotics | X                 |         |             |              | X           | 3                            |                 | P               | 2                 | 2                 | 82      | 30                    |                 | X                     |                |              |                 |
| Morgan Comm Coll<br>17800 Rd 20<br>Fort Morgan 80701<br>Robin Hotchkiss<br>303/867-3081                                                  | Industrial<br>Electronics           |                   |         |             |              | X           |                              |                 |                 |                   |                   |         |                       |                 |                       | X              |              | Being developed |
| Front Range Comm Coll<br>3645 W 112th Ave<br>Westminster 80030<br>Ralph Duncan<br>303/466-8811                                           |                                     | X                 |         |             |              |             |                              |                 |                 |                   |                   |         |                       |                 |                       | X              |              | Being developed |
|                                                                                                                                          |                                     |                   |         |             |              |             |                              |                 |                 |                   |                   |         |                       |                 |                       |                |              |                 |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| CONNECTICUT<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                   | PROGRAM TITLE | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS                  |                 |                 |                   | CONTACT<br>HOURS  | INSTITUTIONAL<br>DATA |     |                 |                       | REMARKS        |              |                 |
|--------------------------------------------------------------------------------------|---------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|-----------------------|-----|-----------------|-----------------------|----------------|--------------|-----------------|
|                                                                                      |               | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES               | LAB | YR. FIRST OFFER | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |                 |
| Waterbury State Tech<br>1460 W Main<br>Waterbury 06708<br>Dr Seretny<br>203/575-8089 | Robotics      | X                 |         |             |              |             |                              |                 |                 |                   |                   |                       |     |                 |                       |                | X            | Being developed |
|                                                                                      |               |                   |         |             |              |             |                              |                 |                 |                   |                   |                       |     |                 |                       |                |              |                 |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| DELAWARE<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                          | PROGRAM TITLE                  | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       | REMARKS |                |                 |
|----------------------------------------------------------------------------------------------------------|--------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|---------|----------------|-----------------|
|                                                                                                          |                                | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT |         | PRIVATE SCHOOL | PUBLIC INST.    |
| Delaware Tech & Comm<br>Coll<br>400 Stanton-Christiana<br>Pki. Newark 19701<br>Gary Haas<br>302/454-3965 | Automation/<br>Robotics        | X                 |         |             | X            |             | 1                            | BS              | 0-5             | F                 |                   | 4                | 3   | 83                    | 10                    |         | X              |                 |
| Delaware Tech & Comm<br>Coll<br>1832 N DuPont Hwy<br>Dover 19901<br>Sam Guccione<br>302/736-5441         | Electrome-<br>chanical<br>Tech | X                 |         |             |              | X           | 2                            | MS              | 10+             |                   |                   |                  |     | 84                    |                       |         | X              | Being developed |
|                                                                                                          |                                |                   |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       |         |                |                 |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| WASHINGTON, DC<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                                                           | PROGRAM TITLE                                                    | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS     |           |                 |                 | CONTACT<br>HOURS  |                   | INSTITUTIONAL<br>DATA |     |                 |                    | REMARKS        |              |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------|---------|-------------|--------------|-------------|-----------------|-----------|-----------------|-----------------|-------------------|-------------------|-----------------------|-----|-----------------|--------------------|----------------|--------------|--|
|                                                                                                                                                                 |                                                                  | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER | SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES               | LAB | YR. FIRST OFFER | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |  |
| Univ of DC<br>Electrical & Mechanical<br>Engineering Tech<br>Bldg 42-109<br>4200 Connecticut AVE NW<br>Washington, DC 20008<br>Dr Edward Walker<br>202/282-7425 | Electrome-<br>mechanical<br>Systems<br>Engineering<br>Technology | X                 |         |             |              |             | X               | 1         | PhD             | 0-5             |                   |                   | 3                     | 3   | 83              | 25                 |                | X            |  |
|                                                                                                                                                                 |                                                                  |                   |         |             |              |             |                 |           |                 |                 |                   |                   |                       |     |                 |                    |                |              |  |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| FLORIDA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                 | PROGRAM TITLE                        | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       |                | REMARKS |                 |
|------------------------------------------------------------------------------------------------|--------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|----------------|---------|-----------------|
|                                                                                                |                                      | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL |         | PUBLIC INST.    |
| National Education Cntr<br>111 NE 44th St<br>Ft Lauderdale 33334<br>Carl Rader<br>305/772-0280 | Electronics<br>Technology            |                   | X       |             |              | X           | 4                            | BS              | 0-5             |                   | 4                 | 4                | 84  | 200                   | X                     |                |         |                 |
| Pensacola Jr Coll<br>1800 College Blvd<br>Pensacola 32104<br>Van Cotsonis<br>904/476-5410      |                                      | X                 |         |             |              | X           | 3                            |                 | 10+             |                   | 5                 | 2                | 83  | 0                     |                       | X              |         | 35 graduates    |
| Palm Beach Jr Coll<br>4200 Congress<br>Lake Worth 33461<br>Phil W Millard<br>305/439-8123      | Electrome-<br>chanical<br>Technology | X                 |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       | X              |         | Being developed |
| Edison College<br>College Pkwy<br>Ft Myers 33901<br>Raymond Crimmel                            | Advanced<br>Industrial<br>Systems    | X                 |         |             |              | X           |                              | AS              | 0-5             |                   | 3                 | 3                | 82  | 18                    | 36                    | X              |         |                 |
| Polk Comm Coll<br>999 Ave H NE<br>Winterhaven 33880<br>Prof H Pearsall<br>813/294-7771         | Electronics<br>Tech                  | X                 |         |             |              | X           | 2-3                          | MS              | 5-10            |                   | 4+                | 4                | 84  | 5                     |                       | X              |         |                 |
| So Florida Comm Coll<br>600 W College Dr<br>Avon Park 33825<br>Larry Hooper<br>813/453-4501    | Digital<br>Electronics               |                   | X       |             |              | X           |                              |                 |                 |                   |                   |                  |     |                       |                       | X              |         | Being developed |
|                                                                                                |                                      |                   |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       |                |         |                 |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| FLORIDA (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                                  | PROGRAM TITLE                                        | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                           |                 |                 | CONTACT HOURS     |                   | INSTITUTIONAL DATA |     |                 |                    | REMARKS |                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|---------------------------|-----------------|-----------------|-------------------|-------------------|--------------------|-----|-----------------|--------------------|---------|--------------------------------------|
|                                                                                                                                             |                                                      | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES            | LAB | YR. FIRST OFFER | CURRENT ENROLLMENT |         | PRIVATE SCHOOL                       |
| Systems Tech Inst<br>6442 Edgewater Dr<br>Orlando 32810<br>James Mason<br>305/299-6536                                                      |                                                      | X                 |         |             |              | X       | 1           | AS                        | 10+             |                 |                   | 30                | 15                 | 83  | 18              | X                  |         | 10 graduates                         |
| Brevard Comm Coll<br>1519 Clear Lake Rd<br>Cocoa 32922<br>Warren Theirs<br>305/632-1111                                                     | Electronics<br>Tech/Electro-<br>mechanical<br>Option | X                 |         |             |              | X       | 1           | BS                        | 10+             |                 |                   | 6                 | 6                  | 80  | 18              |                    | X       |                                      |
| Broward Comm Coll<br>Engineering Tech<br>3501 SW Davie Rd<br>Ft Lauderdale 33314<br>Dr Samuel Oppenheimer<br>305/475-6683                   | Robotics/<br>Process<br>Control                      |                   | X       |             | X            |         | 1           | BS                        | 10+             |                 |                   | 2                 | 1                  | 83  | 52              |                    | X       | Robotics courses follow AAS program. |
| Miami-Dade Comm Coll<br>North Campus<br>11380 NW 27th Ave<br>Miami 33167<br>John Pistorino<br>305/596-1225<br>Harry Forster<br>305/685-4243 | Electronics<br>Technology                            |                   | X       |             |              | X       |             |                           |                 |                 |                   |                   |                    |     |                 |                    | X       | Being developed                      |
| 43                                                                                                                                          |                                                      |                   |         |             |              |         |             |                           |                 |                 |                   |                   |                    |     |                 |                    |         |                                      |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| GEORGIA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                               | PROGRAM TITLE                                            | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                              |                 |                 | CONTACT<br>HOURS  |                   | INSTITUTIONAL<br>DATA |     |                 | REMARKS |                       |
|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|-----------------------|-----|-----------------|---------|-----------------------|
|                                                                                                              |                                                          | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES               | LAB | YR. FIRST OFFER |         | CURRENT<br>ENROLLMENT |
| Southern Tech Inst<br>Clay Street<br>Marietta 30060<br>C N Gebhard<br>404/424-7428                           | Introductory<br>Robotics                                 |                   |         | X           |              | X       | 2           | MS                           | 10+             |                 | 3                 | 2                 | 83                    | 15  |                 | X       |                       |
| Clayton Jr Coll<br>Box 285<br>Morrow 30260<br>David Schlobohm<br>Ralph Clark<br>404/961-3571<br>404/961-3415 | Instrumenta-<br>tion Tech<br>Electrome-<br>chanical Tech | X                 |         |             |              | X       | 2           | BS<br>MS                     | 10+             |                 | 4                 | 3                 | 83                    | 50  |                 | X       |                       |
| DeKalb Area Tech<br>495 N Indian Creek Dr<br>Clarkston 30021<br>Glenn Pfautz<br>404/299-4309                 | Electrome-<br>chanical Tech                              | X                 |         |             |              | X       | 4           | BS<br>MS                     | 5-<br>10+       |                 | 3                 | 3                 | 83                    | 8   |                 | X       |                       |
|                                                                                                              |                                                          |                   |         |             |              |         |             |                              |                 |                 |                   |                   |                       |     |                 |         |                       |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| IDAHO<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                          | PROGRAM TITLE           | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS                  |                 |                 |                   | CONTACT<br>HOURS  | INSTITUTIONAL<br>DATA |     |                 |                       | REMARKS        |              |  |
|---------------------------------------------------------------------------------------|-------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|-----------------------|-----|-----------------|-----------------------|----------------|--------------|--|
|                                                                                       |                         | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES               | LAB | YR. FIRST OFFER | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |  |
| Boise State Univ<br>1910 University Dr<br>Boise 83725<br>Robert Allen<br>208/385-1732 | Industrial<br>Mechanics |                   | X       |             |              | X           | 1                            | BS              | 5-10            | 6                 | -                 | 83                    | 17  |                 | X                     |                |              |  |
|                                                                                       |                         |                   |         |             |              |             |                              |                 |                 |                   |                   |                       |     |                 |                       |                |              |  |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| ILLINOIS<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                 | PROGRAM TITLE                                           | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       |                |              | REMARKS         |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|----------------|--------------|-----------------|
|                                                                                                                 |                                                         | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |                 |
| College of DuPage<br>22nd St & Lambert Rd<br>Glen Ellyn 60137<br>Dr James McCord<br>312/858-2800                | Electronics<br>Engineering<br>Tech/Robotics<br>Option   | X                 |         |             |              | X           | 3<br>6                       | BS              | 5               | F<br>P            | 4+                | 4+               | 83  | 70                    |                       | X              |              |                 |
| Moraine Valley Comm Coll<br>1601 W 115th St<br>Worth 60482<br>Andrew Belford<br>312/371-2210                    | Robotics<br>Skills Tech<br>Training                     |                   | X       |             |              | X           | 3                            | B               | 5-<br>10        |                   |                   | 35               | 18  | 82                    | 20                    | X              |              | 22 graduates    |
| Triton Coll<br>2000 Fifth Ave<br>River Grove 60171<br>Dean Vernon Magnesen<br>Mr. Neal Meredith<br>312/456-0300 | Manufacturing<br>Engineering<br>Tech/Robotics<br>Option | X                 |         | X           |              | X           | 1                            | PhD             | 10+             |                   | 4                 | 2                | 82  | 55                    |                       | X              |              | 90 graduates    |
| Olive-Harvey Coll<br>10001 S Woodlawn Ave<br>Chicago 60628<br>William Thauholt<br>312/568-3700                  | Computer<br>Electronics<br>Technology                   | X                 |         |             |              | X           |                              |                 |                 |                   |                   |                  |     |                       |                       | X              |              | Being developed |
| Richard J Daley College<br>7500 S Pulaski<br>Chicago 60655<br>Mr Gentile<br>217/735-3000                        |                                                         |                   |         | X           |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       | X              |              | Being developed |
|                                                                                                                 |                                                         |                   |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       |                |              |                 |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| ILLINOIS (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                       | PROGRAM TITLE                                                   | DEGREE OFFERED    |         |             |              | PROGRAM     |                           | INSTRUCTORS     |                 |                   |                   | CONTACT HOURS |     | INSTITUTIONAL DATA |                    |                |              | REMARKS         |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------|-----------------|-------------------|-------------------|---------------|-----|--------------------|--------------------|----------------|--------------|-----------------|
|                                                                                                   |                                                                 | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES       | LAB | YR. FIRST OFFER    | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |                 |
| Illinois Central Coll<br>Rt 24<br>E Peoria 61635<br>Richard Polanin<br>309/694-5510               | Robot Tech<br>Robot/MC Serv                                     | X                 |         |             | X            |             | 4                         | MS<br>PhD       | 5-<br>10+       |                   |                   |               |     | 83                 | 180                |                | X            |                 |
| Illinois Valley Comm<br>Coll<br>RR 1, Oglesby 61348<br>Don Haas<br>815/224-2720                   | Robotics<br>Application                                         | X                 |         |             | X            |             | 8                         | MS              | 10+             | F&<br>P           | 4                 | 4             | 83  | 18                 |                    | X              |              |                 |
| Joliet Jr Coll<br>1216 Hubolt Ave<br>Joliet 60436<br>Peter Kiefert<br>815/729-9020                | Electrical/<br>Electronic<br>Automated<br>Systems<br>Technology | X                 |         |             | X            |             | 3                         | BS<br>MS        | 5-<br>10        |                   | 2                 | 3             | 83  | 14                 |                    | X              |              |                 |
| Coll of Lake County<br>19351 W Washington St<br>Gray's Lake 60030<br>Tony Gundrun<br>312/223-6601 | Electrome-<br>chanical<br>Technology                            | X                 |         |             |              | X           | 1                         | MS              | 10+             |                   | 4                 | 2             | 83  | 50                 |                    | X              |              |                 |
| Kankakee Comm Coll<br>Box 888<br>Kankakee 60901<br>Leslie Weedon<br>815/933-0312                  |                                                                 |                   |         |             |              |             |                           |                 |                 |                   |                   |               |     |                    |                    | X              |              | Being developed |
| Richland Comm Coll<br>2425 Federal Dr<br>Decatur 62525<br>Ben Taylor, Jr.                         | None                                                            | X                 |         |             |              |             |                           |                 |                 |                   |                   |               |     |                    |                    | X              |              | Being developed |
|                                                                                                   |                                                                 |                   |         |             |              |             |                           |                 |                 |                   |                   |               |     |                    |                    |                |              |                 |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| ILLINOIS (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                       | PROGRAM TITLE                | EDUCATION         |         |             |              | PROGRAM     |                           | INSTRUCTORS     |                 |                   |                   | CONTACT HOURS |     | INSTITUTIONAL DATA |                    |                |              | REMARKS         |
|---------------------------------------------------------------------------------------------------|------------------------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------|-----------------|-------------------|-------------------|---------------|-----|--------------------|--------------------|----------------|--------------|-----------------|
|                                                                                                   |                              | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES       | LAB | YR. FIRST OFFER    | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |                 |
| Blackhawk Coll<br>6600 34th Ave<br>Moline 61265<br>J R Lambert<br>309/796-1311, ext 342           | Flexible Automation/Robotics | X                 |         |             | X            |             | 2-3                       | AS<br>BS        | 0-10            |                   |                   | 8             | 4+  | 84                 |                    |                | X            |                 |
| Wabash Valley Coll<br>2200 College Dr<br>Mt Carmel 62863<br>Bob Effland<br>618/262-8641           | Electronic Technology        | X                 |         |             |              | X           | 2                         | BS<br>MS        | 10+             |                   |                   | 4             | 2   | 84                 | 0                  |                | X            | Start this fall |
| Waubensee Comm Coll<br>IL Rte 47 at Harter Rd<br>Sugar Grove 60554<br>Norman Paul<br>312/466-4811 | Robotics Technology          | X                 |         |             | X            |             | 2                         | BS              | 5-10            | P                 |                   | 4             | 4   | 84                 |                    |                | X            |                 |
| Bellville Area Coll<br>2500 Carlyle Rd<br>Bellville 62221<br>Robert Arndt<br>816/235-2700         | Electronics Tech             | X                 |         |             |              | X           | 1                         | MS              | 10+             |                   |                   | 4             | 2   | 84                 |                    |                | X            |                 |
| Sauk Valley Coll<br>RR 5, Dixon 61021<br>Jerry Fandra<br>815/288-5511                             |                              |                   |         | X           |              | X           | 1                         | BS              | 10+             |                   |                   | 3             | 2   | 83                 | 10                 |                | X            |                 |
|                                                                                                   |                              |                   |         |             |              |             |                           |                 |                 |                   |                   |               |     |                    |                    |                |              |                 |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| INDIANA<br><br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                                 | PROGRAM TITLE                     | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS               |                 |                    |                   | CONTACT HOURS     |         | INSTITUTIONAL DATA |                 |                    | REMARKS |                 |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------|--------------------|-------------------|-------------------|---------|--------------------|-----------------|--------------------|---------|-----------------|
|                                                                                                                                    |                                   | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION REQUIRED | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB                | YR. FIRST OFFER | CURRENT ENROLLMENT |         | PRIVATE SCHOOL  |
| Indiana VoTech Coll<br>1534 W Sample St<br>South Bend 46619<br>D W Howard<br>219/289-7001                                          | Industrial Electronics            | X                 |         |             |              |             |                           |                 |                    |                   |                   |         |                    |                 |                    | X       | Being developed |
| Indiana VoTech Coll<br>8204 Hwy 311<br>Sellersburg 47172<br>J W Thomas<br>812/246-3301                                             | Industrial Maintenance            | X                 |         |             | X            |             | 4                         | AS MS           | 10+ P              | 4                 | 4                 | 83      | 119                |                 |                    | X       |                 |
| Vincennes Univ<br>Robotics Div<br>Technology Bldg (TB-10)<br>1002 N 2nd<br>Vincennes 47591<br>Mr Bill Spence, Dean<br>812/885-4336 | Robotics Technology               | X                 |         |             | X            |             | 3                         | MS              | 10+                | 5                 | 20                | 83      | 72                 |                 |                    | X       |                 |
| Ball St Univ<br>PAZ0Z<br>2000 University Ave<br>Muncie 47306<br>Dr LeTang<br>317/285-5656                                          | Computer-Integrated Manufacturing | X                 |         |             | X            |             | 2                         | PhD             | 0-5                | 4                 | 4+                | 83      | 20                 |                 |                    | X       |                 |
| Indiana VoTech Coll<br>3800 N Anthony Blvd<br>FtWayne 46805<br>David Brown<br>219/482-9171                                         | Digital/Computer Electronics      | X                 |         |             |              | X           | 4                         | BS MS           | 0-5                | 4                 | 4                 | 83      | 65                 |                 |                    | X       |                 |
|                                                                                                                                    |                                   |                   |         |             |              |             |                           |                 |                    |                   |                   |         |                    |                 |                    |         |                 |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| INDIANA (continued)<br><br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                               | PROGRAM TITLE                       | DEGREE OFFERED    |         |             |              | PROGRAM     |                           | INSTRUCTORS     |                 |                   |                   | CONTACT HOURS |     | INSTITUTIONAL DATA |                    |                |              | REMARKS      |
|----------------------------------------------------------------------------------------------|-------------------------------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------|-----------------|-------------------|-------------------|---------------|-----|--------------------|--------------------|----------------|--------------|--------------|
|                                                                                              |                                     | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES       | LAB | YR. FIRST OFFER    | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |              |
| Indiana VoTech Coll<br>4475 Central Ave<br>Columbus 47202<br>Gene Adair<br>812/372-9925      | Digital/<br>Computer<br>Electronics | X                 |         |             |              | X           | 2                         | AS              | 0-10+           | F                 |                   | 4             | 2   | 84                 | 200                |                | X            |              |
| Indiana VoTech Coll<br>7377 S Dixie Bee Rd<br>Terre Haute 47802<br>Don Arney<br>812/299-1121 | Industrial<br>Electronics           | X                 |         |             |              | X           | 1                         | BS              | 0-5             |                   |                   | 4             | 4   | 83                 | 15                 |                | X            |              |
| Indiana VoTech Coll<br>Box 3100<br>Muncie 47302<br>Mr Dewey Rice<br>317/289-2291             | Industry Tech                       | X                 |         |             |              | X           | 1                         | BS              | 10+             |                   |                   | 5             | 2   | 83                 | 60                 |                | X            |              |
| Tri-State Univ<br>Angola 46703<br>Ed Nagle<br>219/665-3141                                   | Technology                          | X                 |         |             |              | X           | 1                         | MS              |                 |                   |                   | 3             | 2   | 82                 | 25                 | X              |              | 10 graduates |
| Indianapolis VoTech<br>1315 E Washington<br>Indianapolis 46202                               |                                     |                   | X       |             |              | X           | 2                         |                 |                 |                   |                   |               |     | 83                 | 10                 |                | X            |              |
| Indiana VoTech Coll<br>3501 1st Ave<br>Evansville 47710<br>Curtis Palmer<br>812/426-2865     | Industrial<br>Maintenance           | X                 |         |             |              | X           | 1                         | BS              | 10+             |                   |                   | 4             | 1   | 82                 | 100                |                | X            | 50 graduates |
|                                                                                              |                                     |                   |         |             |              |             |                           |                 |                 |                   |                   |               |     |                    |                    |                |              |              |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| IOWA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                        | PROGRAM TITLE              | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                 |                 |                 | CONTACT<br>HOURS  |                   | INSTITUTIONAL<br>DATA |     | REMARKS |                 |                    |
|----------------------------------------------------------------------------------------------------|----------------------------|-------------------|---------|-------------|--------------|---------|-------------|-----------------|-----------------|-----------------|-------------------|-------------------|-----------------------|-----|---------|-----------------|--------------------|
|                                                                                                    |                            | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES               | LAB |         | YR. FIRST OFFER | CURRENT ENROLLMENT |
| Marshalltown Comm Coll<br>3700 S Center<br>Marshalltown 50158<br>Mr Jeff Dodge<br>515/752-7106     | Electronics Technology     | X                 |         |             |              | X       | 3           | AS<br>BS<br>MS  | 0-5<br>5-<br>10 |                 | 5                 | 3                 | 83                    | 41  |         | X               | 9 graduates        |
| S E Comm Coll<br>PO Box F<br>West Burlington 52655<br>J W Smith<br>319/752-2731                    | Mechanical Technology      | X                 |         |             |              | X       | 1           | MS              | 10+             |                 | 1                 | 2                 | 83                    | 6   |         | X               |                    |
| Indian Hills Comm Coll<br>Grandview & Elm<br>Ottumwa 52501<br>Curt Bloomquist<br>515/687-5201      | Robotics Technology        | X                 |         |             | X            |         | 5           | BS              | 5-<br>10        | F               | 12                | 14                | 83                    | 35  |         | X               |                    |
| N W Iowa Tech Coll<br>Hwy 18 W<br>Sheldon 51201<br>Dennis Davis<br>712/324-2587                    | Elect/Mech Tech            | X                 |         |             |              | X       | 2           | AS<br>BS        | 0-<br>10+       |                 | 5                 | 1                 | 83                    | 15  |         | X               |                    |
| Des Moines Area Comm Coll<br>2006 S Ankeny Blvd<br>Ankeny 50021<br>Thomas Dunsmore<br>515/964-6277 | Robotics & Process Control | X                 |         |             | X            |         | 3           | AS<br>BS<br>MS  | 10+             |                 | 3                 | 4                 | 84                    | 30  |         | X               |                    |
| 59                                                                                                 |                            |                   |         |             |              |         |             |                 |                 |                 |                   |                   |                       |     |         |                 | 60                 |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| KANSAS<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                    | PROGRAM TITLE             | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       |                | REMARKS      |
|------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|----------------|--------------|
|                                                                                                                  |                           | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL |              |
| Hutchison Comm Coll<br>1300 N Plum<br>Hutchison 67501<br>Bruce Balman<br>316/665-3549                            |                           | X                 |         |             |              | X           | 4                            | MS              | 10+             |                   | 3                 | 4+               | 83  | 6                     |                       | X              |              |
| Kansas City, Kansas,<br>Comm Coll<br>7250 State Ave<br>Kansas City 66112<br>Bill Chennaut<br>913/334-1100        | Data Proc/<br>Electronics | X                 |         |             |              | X           | 2                            | MS              | 0-5             |                   | 2                 |                  | 83  | 0                     |                       | X              | 15 graduates |
| Johnson County Comm Coll<br>12345 College at Quivira<br>Overland Park 66210<br>Mickey McWilliams<br>913/888-8500 | Manufacturing<br>Tech     | X                 |         |             |              | X           | 1                            | MS              | 10+             |                   | 4                 | 3                | 83  | 25                    |                       | X              |              |
|                                                                                                                  |                           |                   |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       |                |              |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| KENTUCKY<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                             | PROGRAM TITLE      | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS               |                 |                 |                   | CONTACT HOURS     |         | INSTITUTIONAL DATA |                 | REMARKS            |                |              |  |
|-----------------------------------------------------------------------------|--------------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------|-----------------|-------------------|-------------------|---------|--------------------|-----------------|--------------------|----------------|--------------|--|
|                                                                             |                    | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB                | YR. FIRST OFFER | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |  |
| Maysville Comm Coll<br>Rt 2, Maysville 41056<br>J McMillian<br>606/759-7141 | Indus/Elec<br>Tech | X                 |         |             |              | X           | 1                         | MS              | 10+             | 3                 | 3                 | 84      | 29                 |                 |                    | X              |              |  |
|                                                                             |                    |                   |         |             |              |             |                           |                 |                 |                   |                   |         |                    |                 |                    |                |              |  |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| LOUISIANA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                        | PROGRAM TITLE                     | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS                  |                 |                 |                   | CONTACT<br>HOURS  | INSTITUTIONAL<br>DATA |     |                 |                       | REMARKS        |              |                 |
|-----------------------------------------------------------------------------------------|-----------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|-----------------------|-----|-----------------|-----------------------|----------------|--------------|-----------------|
|                                                                                         |                                   | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES               | LAB | YR. FIRST OFFER | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |                 |
| Tulane Univ<br>6283 St Charles<br>New Orleans 70118<br>Michael Lynch<br>504/865-5775    | Programmable<br>Automation<br>Lab |                   |         | X           |              | X           |                              | 2               | MS 5-<br>PhD 10 |                   |                   | 3                     | 1   | 83              | 20                    | X              |              |                 |
| Louisiana St Univ at<br>Eunice, Box 1129<br>Eunice 70535<br>Dr Paul Pai<br>318/457-7311 | Drafting<br>Technology            | X                 |         |             |              | X           |                              |                 |                 |                   |                   |                       |     |                 |                       |                |              | Being developed |
|                                                                                         |                                   |                   |         |             |              |             |                              |                 |                 |                   |                   |                       |     |                 |                       |                |              |                 |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| MARYLAND<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                    | PROGRAM TITLE                       | DEGREE OFFERED    |         |             |              | PROGRAM     |                           | INSTRUCTORS           |                 |                   |                   | CONTACT HOURS |     | INSTITUTIONAL DATA |                    |                |              | REMARKS         |
|----------------------------------------------------------------------------------------------------|-------------------------------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------------|-----------------|-------------------|-------------------|---------------|-----|--------------------|--------------------|----------------|--------------|-----------------|
|                                                                                                    |                                     | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED       | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES       | LAB | YR. FIRST OFFER    | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |                 |
| RETS Electronics Schools<br>511 Russell St<br>Baltimore 21230<br>Mr Earl M Tickler<br>301/327-6863 | Automation<br>Robotic<br>Technology |                   | X       |             | X            |             | 1<br>3                    | 2yr                   | F<br>P          |                   | 5<br>6            | 84            | 24  | X                  |                    |                |              |                 |
| Anne Arundel Comm Coll<br>101 College Pkwy<br>Arnold 21012<br>Kenneth Stibolt<br>301/269-7433      | Mechanical<br>Engineering<br>Tech   | X                 |         | X           |              | X           | 1                         | MS                    | 5-<br>10        |                   | 0                 | 3wk           | 84  | -                  |                    | X              |              |                 |
| Prince George's Comm<br>Coll<br>301 Largo Rd<br>Largo 20772<br>Wm Lauffer<br>301/322-0774          | Elec Tech                           | X                 |         |             |              | X           |                           |                       |                 |                   |                   |               |     |                    |                    | X              |              | Being developed |
| Allegany Comm Coll<br>Willowbrook Rd<br>Cumberland 21502<br>Dr Mark Wojcicki<br>301/724-7700       | Automated/<br>Robotic<br>Systems    | X                 |         |             | X            |             | 4                         | AS<br>BS<br>MS<br>PhD | 5-<br>10+       |                   | 6                 | 3             | 84  | 25                 |                    | X              |              |                 |
|                                                                                                    |                                     |                   |         |             |              |             |                           |                       |                 |                   |                   |               |     |                    |                    |                |              |                 |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| MASSACHUSETTS<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                    | PROGRAM TITLE                                | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       |                |                 | REMARKS |
|-----------------------------------------------------------------------------------------|----------------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|----------------|-----------------|---------|
|                                                                                         |                                              | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST.    |         |
| Tri-County VoTech<br>147 Pond St<br>Franklin<br>Ron Seagrave<br>528-5400                | Computer<br>Electronics                      |                   |         | X           |              | X           | 2                            | MS              | 10+             |                   | 4                 | 4                | 83  | 38                    |                       | X              |                 |         |
| Bristol Comm Coll<br>777 Elsbree<br>Fall River 02720<br>Normand Lavigne<br>617/678-2811 | Engineering<br>Tech                          | X                 |         |             |              | X           | 1                            | BS              | 10+             |                   | 3                 | 1                | 83  | 31                    |                       | X              |                 |         |
| Massasoit Comm Coll<br>Brockton 02402<br>Prof Paul Hardy<br>617/588-9100                | Elect Engr<br>Tech                           | X                 |         |             |              | X           | 2                            | MS              | 10+             | F<br>P            | 2                 | 2                | 84  | 16                    |                       | X              |                 |         |
| North Shore Comm Coll<br>3 Essex St<br>Beverly 01915<br>Ben Merry<br>617/927-4850       | Electrome-<br>chanical Tech<br>Mfg Engr Tech |                   |         |             |              | X           |                              |                 |                 |                   |                   |                  |     |                       |                       | X              | Being developed |         |
|                                                                                         |                                              |                   |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       |                |                 |         |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| MICHIGAN<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                            | PROGRAM TITLE                                                                 | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                           |                 |                 | CONTACT HOURS     |                   | INSTITUTIONAL DATA |     |                 |                    | REMARKS                   |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|---------------------------|-----------------|-----------------|-------------------|-------------------|--------------------|-----|-----------------|--------------------|---------------------------|
|                                                                                                                            |                                                                               | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES            | LAB | YR. FIRST OFFER | CURRENT ENROLLMENT |                           |
| Wayne County Comm Coll<br>1001 W Fort St<br>Detroit 48226<br>John Spurlin<br>313/496-2691                                  | Electromechanical Tech                                                        | X                 |         |             |              | X       |             |                           |                 |                 |                   |                   |                    |     |                 | X                  | Being developed           |
| Mid Michigan Coll<br>1375 S Claire Ave<br>Harrison 48625<br>Tom Groner<br>517/386-7792                                     | Industrial Technology                                                         | X                 |         |             |              | X       | 1           | MS                        | 5-10            |                 | 3                 | 1                 | 84                 |     |                 | X                  |                           |
| West Shore Comm Coll<br>3000 N Stiles Rd<br>Scottsville 49454<br>David Wright<br>616/845-6211                              | Intro to Robotics                                                             |                   |         |             | X            |         |             |                           |                 |                 |                   |                   |                    |     |                 | X                  | Being developed           |
| Henry Ford Comm Coll<br>Career & Occup Studies<br>5101 Evergreen Rd<br>Dearborn 48128<br>Mr John Naghosian<br>313/271-2750 | Electrical/<br>Electronics<br>Technology<br>Robotics/<br>Automation<br>Option | X                 |         |             |              | X       | 8           | MS                        | 5-10            | 50%             | 50%               | 82                | 500                |     |                 | X                  | 200 graduates (estimated) |
| Macomb Comm Coll<br>Mechanical Technology<br>14500 Twelve Mile Rd<br>Warren 48093<br>Prof Lawrence Ford<br>313/445-7411    | Robotics &<br>Flexible<br>Automation                                          | X                 |         |             | X            |         | 4           | MS                        | 10+ F           |                 | 3                 | 2                 | 81                 | 1K  |                 | X                  | 250 graduates             |
| 71                                                                                                                         |                                                                               |                   |         |             |              |         |             |                           |                 |                 |                   |                   |                    |     |                 |                    | 72                        |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| MICHIGAN (continued)<br><br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                                     | PROGRAM TITLE                                                               | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       |                |              | REMARKS |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|----------------|--------------|---------|
|                                                                                                                                                     |                                                                             | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |         |
| Oakland Comm Coll<br>Applied Tech Dept<br>2900 Featherstone Rd<br>Auborn Hts 48016<br>Dr Bill Rose<br>Mr Ed Konopka<br>313/852-1000                 | Robotics<br>Systems<br>Technology                                           | X                 |         |             | X            | 1           | MS                           | 5-10            | F               | 4                 | 4                 | 82               | 400 |                       | X                     |                |              |         |
| Schoolcraft Coll<br>Technology Dept<br>18600 Haggerty Rd<br>Livonia 48152<br>Mr Fernon P Feenstra<br>313/591-6400                                   | Robotics<br>Service<br>Technologist<br>Robot Appli-<br>cation<br>Technician | X                 |         |             | X            | 1           | MS                           | 10+             |                 | 3/5               | 0/4               | 83               | 100 |                       | X                     |                |              |         |
| Washtenaw Comm Coll<br>4000 E Huron River Rd<br>PO Box D-1<br>Ann Arbor 48106<br>Mr Roger Bertoia<br>Mr George Agiu<br>313/973-3474<br>313/973-3300 | Robotics<br>Technology                                                      | X                 |         |             | X            | 2           | MS                           | 10+             |                 | 6                 | 4                 | 82               | 80  |                       | X                     |                |              |         |
| Delta Coll<br>Technical Div<br>University Center 48710<br>Mr Don Holzhei<br>517/686-9442                                                            | Robotics<br>Technology                                                      | X                 |         |             | X            | 4           | MS                           | 0-5             |                 | 4                 | 2                 | 83               | 60  |                       | X                     |                |              |         |
| Grand Rapids Jr Coll<br>Technology Div<br>143 Bostwick NE<br>Grand Rapids 49503<br>Mr Don Boyer<br>616/456-4860                                     | Automated<br>Manufacturing<br>Technology                                    | X                 |         |             | X            | 5           | MS                           | 10+             |                 | 3/4               | 4                 | 84               | -   |                       | X                     |                |              |         |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| MICHIGAN (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                   | PROGRAM TITLE                        | DEGREE OFFERED    |         |             | PROGRAM      |             | INSTRUCTORS     |           |                 |                 | CONTACT HOURS     |                   | INSTITUTIONAL DATA |     |                 | REMARKS |                    |                 |
|-----------------------------------------------------------------------------------------------|--------------------------------------|-------------------|---------|-------------|--------------|-------------|-----------------|-----------|-----------------|-----------------|-------------------|-------------------|--------------------|-----|-----------------|---------|--------------------|-----------------|
|                                                                                               |                                      | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER | SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES            | LAB | YR. FIRST OFFER |         | CURRENT ENROLLMENT | PRIVATE SCHOOL  |
| S W Michigan Coll<br>Cherry Grove Rd<br>Dowagiac 49047<br>N C Ashcraft, Dean                  |                                      |                   |         |             |              |             |                 |           |                 |                 |                   |                   |                    |     |                 |         | X                  | Being developed |
| Kellogg Comm Coll<br>450 N Ave<br>Battle Creek 49016<br>Marut Patel<br>616/965-3931           | Automated<br>Manufacturing           | X                 |         |             | X            |             | 3               | MS        | 10+             | F               | 3-4               | 4                 | 83                 | 20  |                 | X       |                    |                 |
| Kirtland Comm Coll<br>Rt 4, Box 59A<br>Roscommon 48653<br>L L Thayer<br>517/275-5121, ext 245 | Electronics                          | X                 |         |             |              | X           | 1               | BS        | 10+             | F               | 2                 | 4                 | 83                 | 9   |                 | X       |                    |                 |
| Alpena Comm Coll<br>Alpena 49707<br>A E Reed<br>356-9021, ext 233                             | Industrial<br>Engineering            | X                 |         |             |              | X           | 1               | MS        | 10+             |                 | 0                 | 2                 | 83                 | 1   |                 | X       |                    |                 |
| Jackson Comm Coll<br>2111 Emmons Rd<br>Jackson 49201<br>Ralph Burdick<br>517/787-0800         | Robotics/<br>Automation              | X                 |         |             | X            |             | 4               | BS<br>MS  | 5-<br>10        |                 | 2-3               | 3                 | 83                 | 15  |                 | X       |                    |                 |
| Lansing Comm Coll<br>PO Box 40010<br>Lansing 48901<br>Donald B Olson<br>483-1380              | Electrome-<br>chanical<br>Technology | X                 |         |             |              | X           | 3               | MS        | 10+             | F               | 40-<br>60         |                   | 83                 | 50  |                 | X       |                    |                 |
|                                                                                               |                                      |                   |         |             |              |             |                 |           |                 |                 |                   |                   |                    |     |                 |         |                    |                 |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| MICHIGAN (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                  | PROGRAM TITLE                  | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                           |                 |                 | CONTACT HOURS     |                   | INSTITUTIONAL DATA |     |                 |                    | REMARKS             |
|--------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------|---------|-------------|--------------|---------|-------------|---------------------------|-----------------|-----------------|-------------------|-------------------|--------------------|-----|-----------------|--------------------|---------------------|
|                                                                                                              |                                | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES            | LAB | YR. FIRST OFFER | CURRENT ENROLLMENT |                     |
| Montcalm Comm Coll<br>1464 W Sidney Rd<br>Sidney 48885<br>Jesse Fox<br>517/328-2111                          | Industrial Technology          |                   |         | X           |              | X       |             |                           |                 |                 |                   |                   |                    |     |                 | X                  | Support course only |
| Monroe County Comm Coll<br>5555 Raisinville Rd<br>Monroe 48161<br>Jim Stanley                                |                                |                   | X       |             |              |         |             |                           |                 |                 |                   |                   |                    |     |                 | X                  | Being developed     |
| C S Mott Comm Coll<br>Mechanical Tech<br>14500 Twelve Mile Rd<br>Warren 48093<br>Prof L Ford<br>313/445-7327 | Robotics & Flexible Automation | X                 |         |             | X            |         | 4<br>15     | MS                        | 10+             | F<br>P          | 3                 | 2                 | 81                 | 1K  |                 | X                  | 250 graduates       |
| StClair County Comm Coll<br>323 Erie St<br>Port Huron 48060<br>Mr F Mitchell<br>313/984-3811                 | Robotics Technology            | X                 |         |             | X            |         | 1<br>3      | MS                        | 10+             | F<br>P          | 2                 | 3                 | 82                 | 70  |                 | X                  |                     |
|                                                                                                              |                                |                   |         |             |              |         |             |                           |                 |                 |                   |                   |                    |     |                 |                    |                     |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| MINNESOTA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                         | PROGRAM TITLE                         | DEGREE OFFERED    |         |             |              | PROGRAM     |                           | INSTRUCTORS     |                 |                   |                   | CONTACT HOURS |     | INSTITUTIONAL DATA |                    |                | REMARKS |                                    |
|------------------------------------------------------------------------------------------|---------------------------------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------|-----------------|-------------------|-------------------|---------------|-----|--------------------|--------------------|----------------|---------|------------------------------------|
|                                                                                          |                                       | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES       | LAB | YR. FIRST OFFER    | CURRENT ENROLLMENT | PRIVATE SCHOOL |         | PUBLIC INST.                       |
| Granite Falls AVTI<br>Hwy 212 W<br>Granite Falls 56241<br>Duane Olson<br>612/564-4511    | Robotics/<br>Flexible<br>Automation   |                   |         | X           | X            |             | 6                         | BS              | 10+             |                   | 6                 | 3hr<br>day    | 83  | 44                 |                    | X              |         |                                    |
| Staples AVTI<br>300 3rd St N<br>Staples 56479<br>David Carroll<br>218/894-2430           | Robotics<br>Application<br>Technician |                   |         | X           | X            |             | 2                         | AS<br>BS        | 0-5             |                   | 16                | 16            | 83  | 20                 |                    | X              |         |                                    |
| Wilmar Tech Inst<br>PO Box 1097<br>Wilmar 56201<br>John Lambing<br>612/235-5114, ext 181 | Electronics<br>Engineering<br>Tech    |                   |         | X           |              | X           | 1                         | BS              | 10+             |                   |                   |               | 81  |                    |                    | X              |         | Robotics included in other courses |
| Alexandria Tech<br>1601 Jefferson St<br>Alexandria 56308<br>J E Seim<br>612/762-0221     | Fluid Power<br>Technology             |                   |         | X           |              | X           | 1                         | BS              | 5-<br>10        |                   | 6                 | 15            | 78  | 48                 |                    | X              |         | 100 graduates                      |
| Mesabi Comm Coll<br>Virginia 55710<br>Kenneth Pontimen<br>218/741-9200                   |                                       | X                 |         |             |              |             |                           |                 |                 |                   |                   |               |     |                    |                    | X              |         | Being developed                    |
| Tech-Voc Inst<br>235 Marshall Ave<br>St Paul 35102<br>Dr G Richter<br>612/221-1320       | Electrome-<br>chanical<br>Technology  |                   |         | X           |              | X           | 4                         | BS<br>MS        | 10+             |                   | 4                 | 15            | 83  | 305                |                    | X              |         |                                    |
|                                                                                          |                                       |                   |         |             |              |             |                           |                 |                 |                   |                   |               |     |                    |                    |                |         |                                    |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| MISSISSIPPI<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                      | PROGRAM TITLE         | DEGREE OFFERED    |         | PROGRAM     |              | INSTRUCTORS |                           | CONTACT HOURS   |                 | INSTITUTIONAL DATA |                   | REMARKS |         |     |                 |                    |                 |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------|-----------------|--------------------|-------------------|---------|---------|-----|-----------------|--------------------|-----------------|
|                                                                                                                         |                       | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE  | FULL OR PART TIME |         | CLASSES | LAB | YR. FIRST OFFER | CURRENT ENROLLMENT | PRIVATE SCHOOL  |
| Itawamba Jr Coll<br>653 Eason Blvd<br>Tupelo 38801<br>Mr Charles Chrestman<br>Asst Dir<br>Harry Presley<br>601/842-5621 | Robotics Technology   | X                 |         |             |              | X           |                           | 6               | AS 5-<br>BS 10  | F                  | 6                 | 4       | 83      | 24  |                 | X                  |                 |
| Hinds Jr Coll<br>Box 290 UJC<br>Utica 39175<br>William Parks<br>601/885-6062                                            | Industrial Technology | X                 |         |             |              | X           |                           |                 |                 |                    |                   |         |         |     |                 | X                  | Being developed |
|                                                                                                                         |                       |                   |         |             |              |             |                           |                 |                 |                    |                   |         |         |     |                 |                    |                 |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| MISSOURI<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                                   | PROGRAM TITLE                                       | INSTITUTIONAL DATA |         |             |              |             |                 |           |                 |                 |                   | REMARKS           |         |     |                 |                    |                |               |       |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------|---------|-------------|--------------|-------------|-----------------|-----------|-----------------|-----------------|-------------------|-------------------|---------|-----|-----------------|--------------------|----------------|---------------|-------|--|--|
|                                                                                                                                   |                                                     | ASSOC. APPL. SCI.  | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER | SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB | YR. FIRST OFFER | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC SCHOOL | INST. |  |  |
| Jefferson Coll<br>PO Box 126<br>Hillsboro 63050<br>James Newman<br>Dr Ray Walsh, Dean<br>Tech Ed<br>314/789-3951                  | Robotics                                            | X                  |         |             |              | X           |                 | 3         | AS 5-<br>BS 10  | F               | 3                 | 1                 | 83      | 35  |                 |                    | X              |               |       |  |  |
| St Louis Comm Coll<br>Forest Park<br>5600 Oakland Ave<br>St Louis 63110<br>Mr Dan Landiss, Chmn<br>Elec Engr Dept<br>314/644-9100 | Robotics<br>Technology                              | X                  |         |             |              | X           |                 | 4<br>4    | MS 0-5          | F<br>P          | 3                 | 2                 | 83      | 40  |                 |                    | X              |               |       |  |  |
| Penn Valley Comm Coll<br>3201 SW Trafficway<br>Kansas City 64111<br>Robert Crockett<br>816/932-7649                               | Electrome-<br>chanical Tech<br>Microproces-<br>sors | X                  |         |             |              | X           |                 | 2         | BS 10+          |                 | 6                 | 3                 | 84      | 120 |                 |                    | X              |               |       |  |  |
|                                                                                                                                   |                                                     |                    |         |             |              |             |                 |           |                 |                 |                   |                   |         |     |                 |                    |                |               |       |  |  |



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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| NEBRASKA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                   | PROGRAM TITLE                            | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS                  |                 |                 |                   | CONTACT<br>HOURS  |         | INSTITUTIONAL<br>DATA |                 |                       | REMARKS        |              |              |
|-----------------------------------------------------------------------------------|------------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|---------|-----------------------|-----------------|-----------------------|----------------|--------------|--------------|
|                                                                                   |                                          | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB                   | YR. FIRST OFFER | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |              |
| S E Comm Coll<br>AR2 Box 153<br>Milford 68405<br>Earl Fosler<br>402/671-2131      | Electronics<br>Engineering<br>Technician | X                 |         |             |              | X           | 3                            | AS              | 0-5             | F                 |                   |         | 81                    | 42              |                       | X              |              | 25 graduates |
| Central Comm Coll,<br>Platte Campus<br>PO Box 1027<br>Bill Kucera<br>402/564-7132 | Electronics<br>Computers &<br>Automation | X                 |         |             |              | X           | 2                            | AS<br>MS        | 10+             |                   | 2                 | 4       | 83                    | 20              |                       | X              |              |              |
|                                                                                   |                                          |                   |         |             |              |             |                              |                 |                 |                   |                   |         |                       |                 |                       |                |              |              |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| NEW JERSEY<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                | PROGRAM TITLE                                     | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                 |          |           | CONTACT<br>HOURS  |                   | INSTITUTIONAL<br>DATA |     | REMARKS |                 |                    |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|-----------------|----------|-----------|-------------------|-------------------|-----------------------|-----|---------|-----------------|--------------------|
|                                                                                                  |                                                   | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER | NUMBER   | EDUCATION | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES               | LAB |         | YR. FIRST OFFER | CURRENT ENROLLMENT |
| Middlesex County Coll<br>Edison 08818<br>Jack Weintraub<br>201/548-6000                          | Elect Engr<br>Tech                                | X                 |         |             |              | X       |             |                 |          |           |                   |                   |                       |     |         | X               | Being developed    |
| Camden County Coll<br>Box 200<br>Blackwood 08012<br>Prof W Blake<br>609/227-7200                 |                                                   | X                 |         |             |              |         |             |                 |          |           |                   |                   |                       |     |         | X               | Being developed    |
| Somerset County Tech<br>Inst, Box 6350<br>Bridgewater 08807<br>John Kuklis<br>201/526-8900       | Electrome-<br>chanical Tech<br>Robotics<br>Option | X                 |         |             |              | X       | 2           | BS              | 5-<br>10 |           | 3-7               | 4                 | 84                    | 10  |         | X               |                    |
| Gloucester County Coll<br>Tanyard Rd<br>Sewell 08080<br>John Cassady<br>609/468-5000             | Microproces-<br>sors                              | X                 |         |             |              | X       | 2           | BS              | 10+      |           |                   |                   | 83                    | -   |         | X               |                    |
| Bergen Comm Coll<br>400 Paramus Rd<br>Paramus 07652<br>Prof John Burke<br>201/447-7100, ext 3317 | Robotics<br>(Course)                              |                   | X       |             |              | X       | 1           | MS              | 5-<br>10 |           | 4                 | 2                 | 84                    | 17  |         | X               |                    |
| Union County Coll<br>1033 Springfield Ave<br>Cranford 07016<br>James Newman<br>201/889-4100      | Electrome-<br>chanical<br>Tech                    | X                 |         |             |              | X       | 2<br>1      | MS              | 10+      | F<br>P    | 3                 | 3                 | 83                    | 125 |         |                 |                    |
|                                                                                                  |                                                   |                   |         |             |              |         |             |                 |          |           |                   |                   |                       |     |         |                 |                    |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| NEW MEXICO<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                          | PROGRAM TITLE             | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS               |                 |                    |                   | CONTACT HOURS     |         | INSTITUTIONAL DATA |                 |                    | REMARKS        |              |               |
|------------------------------------------------------------------------------------------------------------|---------------------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------|--------------------|-------------------|-------------------|---------|--------------------|-----------------|--------------------|----------------|--------------|---------------|
|                                                                                                            |                           | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION REQUIRED | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB                | YR. FIRST OFFER | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |               |
| Albuquerque Tech Voc<br>Inst<br>525 Buena Vista SE<br>Albuquerque 87106<br>Mr Cecil Lennox<br>505/848-1400 | Instrumentation & Control | X                 |         |             |              | X           | 3                         | MS<br>BS<br>AS  | 10+                |                   |                   | 7       | 8                  | 80              | 120                |                | X            | 160 graduates |
|                                                                                                            |                           |                   |         |             |              |             |                           |                 |                    |                   |                   |         |                    |                 |                    |                |              |               |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| NEW YORK<br><br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                | PROGRAM TITLE                           | DEGREE OFFERED    |         |             |              |             | PROGRAM | INSTRUCTORS                  |                 |                 |                   |                   | CONTACT<br>HOURS | INSTITUTIONAL<br>DATA |     |                 |                       | REMARKS         |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------|---------|-------------|--------------|-------------|---------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----------------------|-----|-----------------|-----------------------|-----------------|
|                                                                                                                    |                                         | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT |         | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME |                  | CLASSES               | LAB | YR. FIRST OFFER | CURRENT<br>ENROLLMENT |                 |
| Cooper Union for Advance-<br>ment of Science & Art<br>51 Astor Pl<br>New York 10003<br>Prof Shetty<br>212/254-6300 |                                         | X                 |         |             |              | X           | 2       | PhD                          | 5-10            |                 | 3                 | 2                 | 84               | 20                    | X   |                 |                       |                 |
| Columbia Green Comm Coll<br>Box 1000<br>Hudson 12534<br>William Thompson<br>518/828-4181                           | Electronics<br>Tech                     | X                 |         |             |              | X           |         |                              |                 |                 |                   |                   |                  |                       |     | X               |                       | Being developed |
| Corning Comm Comm<br>Coll<br>Corning 14830<br>Prof Charles Hauser<br>607/962-9243                                  | Industrial<br>Tech                      | X                 |         |             |              | X           | 4       | BS<br>MS<br>PhD              | 0-10+           |                 | 3                 | 3                 | 82               | 40                    |     | X               |                       | 120 graduates   |
| Niagara County Comm Coll<br>3111 Saunders Settlement<br>Rd, Sanborn 14132<br>Pascal Zanzano<br>716/731-3271        | Mechanical<br>Tech                      | X                 |         |             |              | X           | 1½      | MS                           | 5-10            |                 | 1                 | 3                 | 84               | 14                    |     | X               |                       |                 |
| Erie Comm Coll<br>121 Ellicott St<br>Buffalo 14203<br>Thomas Lemke<br>716/675-5444                                 | Manufacturing<br>Technology<br>Robotics | X                 |         |             | X            |             | 2<br>4  | BS<br>MS                     | 5-10+           | F<br>P          | 3                 | 3                 | 83               | 62                    |     | X               |                       |                 |
| Queensborough Comm Coll<br>56th Ave & Springfield<br>Blvd, Bayside 11364<br>B G Schieber, Jr<br>212/631-6294       | Mechanical<br>Engineering<br>Technology | X                 |         |             |              | X           |         |                              |                 |                 |                   |                   |                  |                       |     | X               |                       | Being developed |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| NEW YORK (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                              | PROGRAM TITLE                                         | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                              |                 |                 | CONTACT<br>HOURS | INSTITUTIONAL<br>DATA |                   |         |     | REMARKS |                 |
|------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|------------------------------|-----------------|-----------------|------------------|-----------------------|-------------------|---------|-----|---------|-----------------|
|                                                                                          |                                                       | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL |                  | INSTR. EXPERIENCE     | FULL OR PART TIME | CLASSES | LAB |         | YR. FIRST OFFER |
| SUNY at Alfred<br>Alfred 14802<br>David Conde<br>607/871-6350                            |                                                       | X                 |         |             |              |         |             |                              |                 |                 |                  |                       |                   |         |     | X       | Being developed |
| Jamestown Comm Coll<br>525 Falcomer St<br>Jamestown 14701<br>Charles Rondeau             | Electronics,<br>Computer,<br>Mechanical<br>Technology | X                 |         |             |              | X       | 1           | MS                           | 10+             |                 |                  | 3                     | 3                 | 83      | 24  | X       |                 |
| Adirondack Comm Coll<br>Bay Road<br>Glens Falls 12801<br>Hubert West<br>518/793-4491     |                                                       |                   |         |             |              |         |             |                              |                 |                 |                  |                       |                   |         |     | X       | Being developed |
| SUNY Ag & Tech Coll<br>Delhi 13753<br>C Nichols<br>607/746-4228                          | Industrial<br>Tech                                    | X                 |         |             |              | X       | 1           | BS                           | 10+             |                 |                  | 1                     | 2                 | 83      | 12  | X       |                 |
| Herkimer County Comm<br>Coll<br>Herkimer 13350<br>Frank Menapace<br>315/866-0300         | Prerobotics<br>Technology                             | X                 |         |             | X            |         | 1           | MS                           | 10+             |                 |                  | 3                     | 2                 | 84      | 3   | X       |                 |
| Rockland Comm Coll<br>145 College Rd<br>Suffern 10901<br>Ignacio Stanley<br>914/356-4650 | Electrome-<br>chanical<br>Technology                  | X                 |         |             |              | X       | 2           | BS<br>MS                     | 5-<br>10        |                 |                  | 6                     | 2                 | 84      | 12  | X       |                 |
|                                                                                          |                                                       |                   |         |             |              |         |             |                              |                 |                 |                  |                       |                   |         |     |         |                 |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| NEW YORK (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                   | PROGRAM TITLE                       | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                           |                 |                 | CONTACT HOURS     |                   | INSTITUTIONAL DATA |     | REMARKS |                 |                    |
|-----------------------------------------------------------------------------------------------|-------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|---------------------------|-----------------|-----------------|-------------------|-------------------|--------------------|-----|---------|-----------------|--------------------|
|                                                                                               |                                     | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES            | LAB |         | YR. FIRST OFFER | CURRENT ENROLLMENT |
| Orange County Comm Coll<br>115 South St<br>Middletown 10940<br>Arlin Bartlett<br>914/343-1121 | Electronics/<br>Computer<br>Systems | X                 |         |             |              | X       | 5           | MS 5-<br>PhD 10+          |                 | 6               | 9                 | 81                | 1?                 |     | X       |                 | 40 graduates       |
|                                                                                               |                                     |                   |         |             |              |         |             |                           |                 |                 |                   |                   |                    |     |         |                 |                    |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| NORTH CAROLINA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                   | PROGRAM TITLE                              | DEGREE OR FIELD   |         |             |              | PROGRAM | INSTRUCTORS |                 |           |                 | CONTACT<br>HOURS | INSTITUTIONAL<br>DATA |                   |                   |         | REMARKS |     |                 |
|-----------------------------------------------------------------------------------------|--------------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|-----------------|-----------|-----------------|------------------|-----------------------|-------------------|-------------------|---------|---------|-----|-----------------|
|                                                                                         |                                            | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER | SPECIALTY | NUMBER REQUIRED |                  | EDUCATION LEVEL       | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES |         | LAB | YR. FIRST OFFER |
| Rowan Tech Coll<br>Box 1595<br>Sallsbury 28144<br>John Burns<br>704/637-0760            | Manufacturing<br>Engineering<br>Technology | X                 |         |             |              | X       |             |                 |           |                 |                  |                       |                   |                   |         | X       |     | Being developed |
| Ashville-Buncombe Tech<br>Coll, 340 Victoria Rd<br>Ashville 28801<br>Olin Wood          |                                            |                   | X       |             |              |         |             |                 |           |                 |                  |                       |                   |                   |         | X       |     | Being developed |
| Davidson County Comm<br>Coll, Box 1287<br>Lexington 27292<br>Charles Su<br>704/249-8186 | Mechanical<br>Technology                   | X                 |         |             |              | X       |             |                 |           |                 |                  |                       |                   |                   |         | X       |     | Being developed |
| Pitt Comm Coll<br>PO Drawer 7007<br>Greenville 27834<br>E Bright<br>919/756-3130        | Electronics<br>Tech                        | X                 |         |             |              | X       | 6           | BS              | 0-5       | F               | 10               | 12                    | 82                | 60                |         | X       |     | 75 graduates    |
| Tri-County Comm Coll<br>PO Box 40<br>Murphy 28906<br>Walter L Tratham<br>704/837-6810   |                                            | X                 |         |             |              |         | X           | 1               | PhD       | 10              | F                | 3                     | 4                 | 83                | 3       |         | X   |                 |
| Surry Comm Coll<br>PO Box 704<br>Dobson 27030<br>John Collins<br>386-8121               | Electronics                                | X                 |         |             |              | X       |             |                 |           |                 |                  |                       |                   |                   |         | X       |     | Being de eloped |
| 97                                                                                      |                                            |                   |         |             |              |         |             |                 |           |                 |                  |                       |                   |                   |         |         |     | 98              |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| NORTH CAROLINA<br>(continued)<br><br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                         | PROGRAM TITLE                           | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                           |                 |                 | CONTACT HOURS     |                   | INSTITUTIONAL DATA |     |                 | REMARKS |                    |
|--------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|---------------------------|-----------------|-----------------|-------------------|-------------------|--------------------|-----|-----------------|---------|--------------------|
|                                                                                                  |                                         | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES            | LAB | YR. FIRST OFFER |         | CURRENT ENROLLMENT |
| Forsyth Tech Inst<br>2100 Silas Creek Pkwy<br>Winston-Salem 27103<br>John Beeson<br>919/723-0371 | Manufacturing Engineering Technology    | X                 |         |             |              | X       | 1           | BS                        |                 |                 | 3                 | 2                 | 84                 | 36  |                 | X       |                    |
| Maryland Tech<br>PO Box 547<br>Spruce Pine 28777<br>J Cox                                        | Electrical Engineering Technology       | X                 |         |             |              | X       | 2           | BS MS                     | 10+             |                 | 10                | 4                 | 82                 | 16  |                 | X       | 16 graduates       |
| Wilkes Comm Coll<br>Wilkesboro 28697<br>Josephine Hendrix<br>919/667-7136                        | Electromechanical Electronics           | X                 |         |             |              | X       |             |                           |                 |                 |                   |                   |                    |     |                 | X       | Being developed    |
| Tech Coll of Almance<br>PO Box 623<br>Haw River 27258<br>R R Stockard<br>919/578-2002            | Engineering Tech                        | X                 |         |             |              | X       | 1           | MS                        | 10+             |                 | 5                 | 3                 | 84                 | 25  |                 | X       |                    |
| Central Piedmont Comm Coll, PO Box 35009<br>Charlotte 28235<br>T A Allison<br>704/373-6786       | Electrical/Electronics Engineering Tech | X                 |         |             |              | X       | 2           | BS MS                     | 5-10+           |                 | 3                 | 3                 | 83                 | 15  |                 | X       |                    |
| Nash Tech Coll<br>Old Carriage Rd<br>Rock Wound 27809<br>Jerome Hodges<br>919/443-4011           | Electronics Engineering Tech            | X                 |         |             |              | X       | 3           | BS MS                     | 0-10            |                 | 4                 | 4                 | 83                 | 15  |                 | X       |                    |
|                                                                                                  |                                         |                   |         |             |              |         |             |                           |                 |                 |                   |                   |                    |     |                 |         |                    |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| NORTH CAROLINA<br>(continued)<br><br>SCHOOL &<br>ROBOTICS<br>COORDINATOR    | PROGRAM TITLE | HIGHER OFFERED    | PROGRAM | INSTRUCTORS |              | CONTACT HOURS |                           | INSTITUTIONAL DATA |                    | REMARKS           |                   |         |     |                 |                    |                |              |                   |
|-----------------------------------------------------------------------------|---------------|-------------------|---------|-------------|--------------|---------------|---------------------------|--------------------|--------------------|-------------------|-------------------|---------|-----|-----------------|--------------------|----------------|--------------|-------------------|
|                                                                             |               | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT   | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED    | EDUCATION REQUIRED | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB | YR. FIRST OFFER | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |                   |
| Piedmont Tech Coll<br>Box 1197<br>Roxboro 47573<br>D. Rentz<br>919/599-1181 |               | X                 |         |             |              |               |                           |                    |                    |                   |                   |         |     |                 |                    |                |              | X Being developed |
|                                                                             |               |                   |         |             |              |               |                           |                    |                    |                   |                   |         |     |                 |                    |                |              |                   |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| NORTH DAKOTA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                    | PROGRAM TITLE             | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS                  |                 |                 |                   | CONTACT<br>HOURS  |         | INSTITUTIONAL<br>DATA |                 |                       | REMARKS        |              |  |
|--------------------------------------------------------------------------------------------------------|---------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|---------|-----------------------|-----------------|-----------------------|----------------|--------------|--|
|                                                                                                        |                           | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB                   | YR. FIRST OFFER | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |  |
| North Dakota School of<br>Science, Technical Div<br>Wahpeton 58075<br>Mr Don Stevenson<br>701/671-2278 | Robotics &<br>Adv Welding | X                 |         |             |              | X           |                              | 2               | BS              | 5-<br>10+         | F                 | 21      | 15                    | 84              | 14                    |                | X            |  |
|                                                                                                        |                           |                   |         |             |              |             |                              |                 |                 |                   |                   |         |                       |                 |                       |                |              |  |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| OHIO<br><br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                | PROGRAM TITLE                                         | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                              |                 |                 | CONTACT<br>HOURS  |                   | INSTITUTIONAL<br>DATA |     |                 |                       | REMARKS      |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|-----------------------|-----|-----------------|-----------------------|--------------|
|                                                                                                |                                                       | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES               | LAB | YR. FIRST OFFER | CURRENT<br>ENROLLMENT |              |
| Kent State Univ<br>14111 Claridon-Troy Rd<br>Burton 44021<br>Gregory Shrene<br>216/834-4187    | Computer-<br>Integrated<br>Manufacturing              | X                 |         |             | X            |         | 1 PhD       | 10+                          |                 |                 | 2                 | 3                 | 83                    | 20  |                 | X                     |              |
| Owens Tech Coll<br>Callier 10000<br>Toledo 43699<br>Dave Winters<br>419/666-0580               | Electromechanical<br>(Robotics)                       | X                 |         |             | X            |         | 3 MS        | 0-5                          |                 |                 | 3                 | 3                 | 83                    | 211 |                 | X                     |              |
| Ohio Univ<br>1570 Granville Pike<br>Lancaster 43130<br>Zale Maxwell<br>614/654-6711            | Industrial<br>Technology<br>Electronics<br>Technology | X                 |         |             |              | X       | 3 MS        | 5-10                         |                 |                 | 4                 | 2                 | 80                    | 75  |                 | X                     | 15 graduates |
| Southern Ohio Coll<br>4781 Hamilton Ave<br>Cincinnati 45223<br>Robert Hockstra<br>513/681-0580 | Robotics &<br>Automated<br>Mach                       | X                 |         |             | X            |         | 6 BS        | 10+                          |                 |                 | 4                 | 4                 | 83                    | 400 | X               |                       |              |
| Lima Tech Coll<br>4300 Campus Dr<br>Lima 45804<br>Norman Rex<br>419/227-5131                   | Basic<br>Robotics                                     | X                 |         |             | X            |         | 2 BS<br>MS  | 5-10+                        |                 |                 | 6                 | 4                 | 84                    | 15  |                 | X                     |              |
| Stark Tech Coll<br>6200 Frank Ave<br>Canton 44720<br>Charles Danner<br>216/494-6170            | Mechanical<br>Engineering<br>Technology               | X                 |         |             |              | X       | 1 MS        | 5-10                         |                 |                 | 2                 | 2                 | 84                    | 25  |                 | X                     |              |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| OHIO (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                | PROGRAM TITLE                            | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                              |                 |                 | CONTACT<br>HOURS | INSTITUTIONAL<br>DATA |                   |         |     | REMARKS |                 |
|--------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|------------------------------|-----------------|-----------------|------------------|-----------------------|-------------------|---------|-----|---------|-----------------|
|                                                                                                        |                                          | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL |                  | INSTR. EXPERIENCE     | FULL OR PART TIME | CLASSES | LAB |         | YR. FIRST OFFER |
| Lorain County Comm Coll<br>1005 N Abbe Rd<br>Elyria 44035<br>Clyde Welsh<br>216/365-4191               | Robotics                                 | X                 |         |             | X            |         | 3           | AS<br>MS                     | 0-<br>10        |                 | 2                | 4                     | 83                | 257     |     | X       |                 |
| Wright St Univ<br>West Ohio Branch<br>7600 St Rt 703<br>Celina 45822<br>Art Burd<br>419/586-2365       | Electronics<br>Engineering<br>Technology | X                 |         |             |              | X       |             |                              |                 |                 |                  |                       |                   |         |     | X       | Being developed |
| Terra Tech Coll<br>Engineering Dept<br>1220 Cedar St<br>Fremont 43420<br>Tom Kisseld<br>419/334-3886   | Electrical/<br>Robotics                  | X                 |         |             | X            |         | 2           | AS<br>MS                     | 5-<br>10+       |                 | 3                | 5+                    | 82                | 90      |     | X       |                 |
| Clark Tech Coll<br>570 E Leffels Lane<br>Springfield 45505<br>Dr Monte Coffin<br>513/325-0691, ext 255 | Mechanical<br>Engineering<br>Technology  | X                 |         |             |              | X       | 2           | MS                           | 5-<br>10        | F               | 6                | 3                     | 84                | 40      |     | X       |                 |
| North Central Tech Coll<br>PO Box 648<br>Mansfield 44901<br>E C Boso<br>419/747-4999                   | Mechanical<br>Engineering<br>Technology  | X                 |         |             |              | X       |             |                              |                 |                 |                  |                       |                   |         |     | X       | Being developed |
|                                                                                                        |                                          |                   |         |             |              |         |             |                              |                 |                 |                  |                       |                   |         |     |         |                 |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| OHIO (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                 | PROGRAM TITLE                            | DEGREE OFFERED               |             |              |             | PROGRAM | INSTRUCTORS                  |                 |                 |                   | CONTACT<br>HOURS  |         | INSTITUTIONAL<br>DATA |                 |                       | REMARKS |                |
|---------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------|-------------|--------------|-------------|---------|------------------------------|-----------------|-----------------|-------------------|-------------------|---------|-----------------------|-----------------|-----------------------|---------|----------------|
|                                                                                                         |                                          | ASSOC. 4-PL. SCI.<br>DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT |         | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB                   | YR. FIRST OFFER | CURRENT<br>ENROLLMENT |         | PRIVATE SCHOOL |
| Cincinnati Tech Coll<br>3520 Central Pkwy<br>Cincinnati 45223<br>Rob Sperkert<br>513/559-1520           | Computer-<br>Integrated<br>Manufacturing | X                            |             |              | X           | 2+      | BS<br>MS                     | 5-<br>10        |                 | 3-5               | 2-4               | 83      | 250                   |                 | X                     |         |                |
| Ohio Northern Univ<br>Ada 45810<br>Dr Leo Maier, Jr<br>419/772-2385                                     |                                          |                              |             | X            | X           | 1       | PhD                          | 10+             |                 | 3                 | 2                 | 83      | 34                    | X               |                       |         |                |
| Firelands College,<br>Bowling Green State Univ<br>901 Rye Beach Blvd<br>Huron 44839<br>419/433-5560     | Engineering<br>Technology                | X                            |             |              | X           | 2<br>1  | MS<br>PhD                    | 10+<br>P        | F               | 10                | 16                | 79      | 55                    |                 | X                     |         | 28 graduates   |
| Shawnee St Coll<br>940 2nd St<br>Portsmouth 45662<br>C R Irwin<br>614/354-3205                          | Electrome-<br>chanical                   | X                            |             |              | X           | 3       | AS<br>BS                     | 5-<br>10+       |                 | 3                 | 3                 | 84      | 25                    |                 | X                     |         |                |
| Central Ohio Tech Coll<br>Engineering Div<br>University Dr<br>Newark 43055<br>Mr Walker<br>614/366-9250 | Electrome-                               | X                            |             |              | X           | 1       | BS                           | 10+             |                 | 3                 | 5                 | 82      | 34                    |                 | X                     |         | 30 graduates   |
|                                                                                                         |                                          |                              |             |              |             |         |                              |                 |                 |                   |                   |         |                       |                 |                       |         |                |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| OKLAHOMA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                       | PROGRAM TITLE                                      | DEGREE OFFERED    |         |             |              |             |                 |           |                 |                 |                   | PROGRAM           |         |     |                 | INSTRUCTORS        |                |              | CONTACT<br>HOURS |  | INSTITUTIONAL<br>DATA |  |  | REMARKS         |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------|---------|-------------|--------------|-------------|-----------------|-----------|-----------------|-----------------|-------------------|-------------------|---------|-----|-----------------|--------------------|----------------|--------------|------------------|--|-----------------------|--|--|-----------------|
|                                                                                                       |                                                    | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER | SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB | YR. FIRST OFFER | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |                  |  |                       |  |  |                 |
| E1 Reno Jr Coll<br>Box 370<br>1300 S Country Club Rd<br>E1 Reno 73036<br>Miller Tiger<br>405/262-2552 | Electronics<br>Technology                          | X                 |         |             |              | X           |                 |           |                 |                 |                   |                   |         |     |                 |                    |                |              |                  |  | X                     |  |  | Being developed |
| Oklahoma St Tech<br>Okmulgee 74447<br>Bill J Lyons<br>918/756-6211                                    | Computer-<br>Integrated<br>Syst Service            | X                 |         |             |              | X           | 1               | BS        | 10+             |                 | 9                 | 10                | 83      | 15  |                 |                    | X              |              |                  |  |                       |  |  |                 |
| O S U Tech Inst<br>900 N Portland<br>Oklahoma City 73107<br>Dr D Yeager<br>405/947-4421               | Electronics &<br>Industrial<br>Drafting Tech       | X                 |         |             |              | X           | 2               | BS<br>MS  | 10+             |                 | 3                 | 2                 | 83      | 40  |                 |                    | X              |              |                  |  |                       |  |  | 80 graduates    |
| Rose St Coll<br>6420 SE 15th<br>Midwest City 73110<br>John Hansen<br>405/733-7450                     | Electronics<br>Technology,<br>Robotics<br>Option   | X                 |         |             |              | X           | 3               | MS<br>PhD | 5-<br>10+       |                 | 3                 | 2                 | 83      | 25  |                 |                    | X              |              |                  |  |                       |  |  |                 |
| Tulsa Jr Coll<br>3727 E Apache<br>Tulsa 74115<br>Ron Paquette<br>918/834-5071                         | Electrome-<br>chanical &<br>Robotics<br>Technology | X                 |         |             |              | X           | 2               | BS        | 5-<br>10        |                 | 4                 | 2                 | 84      | 54  |                 |                    | X              |              |                  |  |                       |  |  |                 |
| 111                                                                                                   |                                                    |                   |         |             |              |             |                 |           |                 |                 |                   |                   |         |     |                 |                    |                |              |                  |  |                       |  |  | 112             |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| OREGON<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                | PROGRAM TITLE                      | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                              |                 |                 | CONTACT<br>HOURS | INSTITUTIONAL<br>DATA |                   |         |     | REMARKS |                 |
|----------------------------------------------------------------------------------------------|------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|------------------------------|-----------------|-----------------|------------------|-----------------------|-------------------|---------|-----|---------|-----------------|
|                                                                                              |                                    | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL |                  | INSTR. EXPERIENCE     | FULL OR PART TIME | CLASSES | LAB |         | YR. FIRST OFFER |
| Portland Comm Coll<br>12000 SW 49th Ave<br>Portland 97219<br>Dr Robert Dixon<br>503/244-6111 | Electr Engr<br>Tech                |                   |         |             |              | X       |             |                              |                 |                 |                  |                       |                   |         |     | X       | Being developed |
| Mt Hood Comm Coll<br>26000 SE Stark<br>Gresham 97030<br>Dr R S Nicholson<br>503/667-6422     | Automated<br>Systems<br>Technology | X                 |         |             |              |         |             |                              |                 |                 |                  |                       |                   |         |     | X       | Being developed |
| Lane Comm Coll<br>4000 E 30th<br>Eugene 97405<br>Jim Krizor<br>503/747-4501, ext 2245        | Computers &<br>Robotics            |                   | X       |             | X            | 1       | MS          | 0-5                          | 5               | 3               | 84               | 18                    |                   |         | X   |         |                 |
| Clatsop Comm Coll<br>16th & Jerome St<br>Astoria 97103<br>Gilbert Doty<br>503/325-0910       | Electronics<br>Technology          | X                 |         |             |              | X       | 2           | BS                           | 0-5             | 6               | 4                | 83                    | 10                |         | X   |         |                 |
|                                                                                              |                                    |                   |         |             |              |         |             |                              |                 |                 |                  |                       |                   |         |     |         |                 |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| PENNSYLVANIA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                           | PROGRAM TITLE                           | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       |                |                 | REMARKS |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|----------------|-----------------|---------|
|                                                                                                                               |                                         | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST.    |         |
| Mach Shop Tech Inst<br>110 S Main St<br>Pittsburgh 15220<br>Frank Sanns<br>412/922-2602                                       | Robotic<br>Engineering<br>Tech          | X                 |         |             | X            |             | 5                            | BS 10+          |                 | 5                 | 25                | 83               | 40  | X                     |                       |                |                 |         |
| Westmoreland County<br>Comm Coll<br>Youngwood 15697<br>David Bruce<br>412/925-4008                                            | Electronics<br>Tech                     | X                 |         |             | X            |             | 3                            | BS 0-5 P        |                 | 3                 | 3                 | 83               | 18  |                       | X                     |                |                 |         |
| Comm Coll of Allegheny<br>County, South Campus<br>1750 Clairton Rd<br>West Mifflin 15122<br>Pearly Cunningham<br>412/469-1100 | Science &<br>Engineering<br>Technology  | X                 |         |             | X            |             |                              |                 |                 |                   |                   |                  |     |                       | X                     |                | Being developed |         |
| Delaware County Comm<br>Coll<br>Media 19063<br>Glenn Artmay<br>215/359-5288                                                   | Automated<br>Manufacturing<br>/Robotics | X                 |         |             | X            |             |                              |                 |                 |                   |                   |                  |     |                       | X                     |                | Being developed |         |
| Pennsylvania Inst of<br>Technology<br>800 Manchester<br>Media 19063<br>W Koffke<br>215/565-7900                               | Automated<br>Manufacturing              | X                 |         |             | X            |             | 2                            | MS 0-5 F        |                 | 4                 | 2                 | 83               | 50  | X                     |                       |                |                 |         |
|                                                                                                                               |                                         |                   |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       |                |                 |         |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| PENNSYLVANIA<br>(continued)<br><br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                        | PROGRAM TITLE                | DEGREE OFFERED    |         |             |              | PROGRAM     | INSTRUCTORS                  |                 |                 |                   | CONTACT<br>HOURS  | INSTITUTIONAL<br>DATA |     |                 |                       | REMARKS |                 |
|-----------------------------------------------------------------------------------------------|------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|-----------------------|-----|-----------------|-----------------------|---------|-----------------|
|                                                                                               |                              | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES               | LAB | YR. FIRST OFFER | CURRENT<br>ENROLLMENT |         | PRIVATE SCHOOL  |
| Williamsport Comm Coll<br>Williamsport 17706<br>George Baker<br>717/326-3761                  | Industrial<br>Technology     | X                 |         |             |              | X           |                              |                 |                 |                   |                   |                       |     |                 |                       | X       | Being developed |
| Lehigh County Comm<br>Coll<br>23700 Main<br>Schnelksville 18078<br>Ed Troyhan<br>215/799-1507 | Electronics<br>Microcomputer | X                 |         |             |              | X           |                              | MS 10+          |                 | 4                 | 4                 |                       |     |                 |                       | X       | Being developed |
|                                                                                               |                              |                   |         |             |              |             |                              |                 |                 |                   |                   |                       |     |                 |                       |         |                 |



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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| SOUTH CAROLINA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                            | PROGRAM TITLE                          | DEGREE OFFERED    |         |             |              |             |                              |                 | PROGRAM | INSTRUCTORS     |                   |                   |         | CONTACT<br>HOURS | INSTITUTIONAL<br>DATA |                       |                |                 | REMARKS |
|------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|---------|-----------------|-------------------|-------------------|---------|------------------|-----------------------|-----------------------|----------------|-----------------|---------|
|                                                                                                                  |                                        | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED |         | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB              | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST.    |         |
| Piedmont Tech Coll<br>Electronic Engr Tech<br>PO Drawer 1467<br>Greenwood 29648<br>Mr James Rehg<br>803/223-8357 | Robotics<br>Technology                 | X                 |         | X           | X            |             | 2                            | MS              | 10+     |                 | 7                 | 8                 | 83      | 30               |                       |                       | X              |                 |         |
| Aiken Tech Coll<br>PO Drawer 696<br>Aiken 29801<br>James Wertz<br>803/593-9231                                   | Electrome-<br>chanical<br>Tech         | X                 |         |             |              | X           | 2                            | BS<br>MS        | 10+     | F               | 3-8               | 3-9               |         | 45               |                       |                       | X              |                 |         |
| Spartanburg Tech Coll<br>Drawer 4366<br>Spartanburg 29305<br>Kemp Sigmon                                         | Industrial<br>Management<br>Technology | X                 |         |             |              | X           |                              |                 |         |                 |                   |                   |         |                  |                       |                       | X              | Being developed |         |
|                                                                                                                  |                                        |                   |         |             |              |             |                              |                 |         |                 |                   |                   |         |                  |                       |                       |                |                 |         |

[illegible]

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| TENNESSEE<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                    | PROGRAM TITLE                                 | DEGREE OFFERED    |         |             |              | PROGRAM     |                           | INSTRUCTORS     |                 |                      |                   | CONTACT HOURS |     | INSTITUTIONAL DATA |                    |                | REMARKS         |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------|-----------------|----------------------|-------------------|---------------|-----|--------------------|--------------------|----------------|-----------------|
|                                                                                                     |                                               | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXP. PERIENCE | FULL OR PART TIME | CLASSES       | LAB | YR. FIRST OFFER    | CURRENT ENROLLMENT | PRIVATE SCHOOL |                 |
| Motlow St Comm Coll<br>Industrial Tech<br>Tullahoma 37388<br>Mr Jasper Templeton<br>615/455-8511    | Engineering Technology                        | X                 |         |             |              | X           | 1                         | MS              | 10+             |                      | 3                 | 0             |     |                    |                    | X              | Being developed |
| Columbia St Comm Coll<br>Hampshire Pk<br>Columbia 38401<br>Clyde Denton<br>388-0120, ext 329        | Electronics Technology                        | X                 |         |             |              | X           | 1                         | BS<br>MS        | 5-<br>10+       |                      | 3                 | 3             | 84  | 12                 |                    | X              |                 |
| Chattanooga St Tech Coll<br>4501 Amnicola Hwy<br>Chattanooga 37406<br>Oliver Benton<br>615/697-4411 | Robotics                                      | X                 |         |             | X            |             | 3                         | MS<br>PhD       | 5-<br>10+       | F                    | 3                 | 2             | 83  | 68                 |                    | X              |                 |
| Dyersburg St Comm Coll<br>PO Box 448<br>Dyersburg 38024<br>John Moore<br>901/285-6910               | Industrial Electronics                        | X                 |         |             |              | X           | 1                         | MS              | 5-<br>10        | F                    | 3                 | 3             | 84  | 16                 |                    | X              |                 |
| Nashville St Tech Inst<br>120 White Bridge Rd<br>Nashville 37709<br>Joel Lavaller<br>615/741-1235   | Automation/<br>Robotics<br>Technology         | X                 |         |             | X            |             | 2                         | BS<br>MS        | 0-5             |                      | 3                 | 3             | 83  | 83                 |                    | X              |                 |
| Walters St Comm Coll<br>Morristown 37814<br>Safabakhsh, Reza<br>615/581-2121                        | Electromechanical &<br>Robotics<br>Technology | X                 |         |             |              |             |                           |                 |                 |                      |                   |               |     |                    |                    | X              | Being developed |
|                                                                                                     |                                               |                   |         |             |              |             |                           |                 |                 |                      |                   |               |     |                    |                    |                |                 |



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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| TENNESSEE<br>(continued) | SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                          | PROGRAM TITLE                           | DEGREE OFFERED    |         |             |              | PROGRAM      | INSTRUCTORS                  |                 |                 |                   | CONTACT<br>HOURS  |         | INSTITUTIONAL<br>DATA |                |                       | REMARKS        |              |  |
|--------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------|-------------------|---------|-------------|--------------|--------------|------------------------------|-----------------|-----------------|-------------------|-------------------|---------|-----------------------|----------------|-----------------------|----------------|--------------|--|
|                          |                                                                                              |                                         | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | IN-DEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES | LAB                   | YR FIRST OFFER | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |  |
|                          | Tri-Cities St Tech Inst<br>Box 246<br>Blountville 37617<br>Jim Chandler<br>615/323-3191      | Mechanical<br>Engineering<br>Technology | X                 |         |             |              | X            | 2                            | MS              | 10+             |                   |                   | 3       | 3                     |                | 54                    |                | X            |  |
|                          | St Tech Inst of Memphis<br>5983 Macon Cove<br>Memphis 38134<br>Les Seager<br>901/377-4214    | Robotics &<br>Automated<br>Mfg          |                   |         | X           |              | X            | 2                            | BS<br>MS        | 0-5             |                   |                   | 3       | 3                     | 83             | 20                    |                | X            |  |
|                          | St Tech Inst at<br>Knoxville, Division St<br>Knoxville 37919<br>Frank Darwin<br>615/584-6103 | Engineering<br>Technology               | X                 |         |             |              | X            | 1<br>1                       | BS              | 10+             | F<br>P            |                   | 3       | 3                     | 84             | 12                    |                | X            |  |
|                          |                                                                                              |                                         |                   |         |             |              |              |                              |                 |                 |                   |                   |         |                       |                |                       |                |              |  |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| TEXAS<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                  | PROGRAM TITLE                           | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       |                |                 | REMARKS |
|-----------------------------------------------------------------------------------------------|-----------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|----------------|-----------------|---------|
|                                                                                               |                                         | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST.    |         |
| Midland Coll<br>3600 N Garfield<br>Midland 79701<br>Dr Richard Holmes<br>915/684-7851         | Robotics                                |                   |         | X           | X            |             | 1                            | BS              | 10+             |                   | 3                 | 3                | 83  | 15                    |                       | X              |                 |         |
| Tarrant County Jr Coll<br>5301 Campus Dr<br>Fort Worth 76115<br>Jim Moore<br>817/531-0430     | Electromechanical Tech                  | X                 |         |             |              | X           | 2<br>2                       | BS              | 5-              | F<br>P            | 2                 | 3                | 82  | 50                    |                       | X              |                 |         |
| Hill Jr Coll<br>PO Box 619<br>Hillsboro 76645<br>Jim Poole                                    | Industrial<br>Electronics/<br>Robotics  | X                 |         |             |              | X           | 1                            | BS              | 10+             |                   | 6                 | 3                | 84  | 1                     | X                     |                |                 |         |
| Houston Comm Coll<br>PO Box 7849<br>Houston 77270<br>Reddy<br>713/868-0787                    | Computer<br>Manufacturing<br>Technology | X                 |         |             | X            |             |                              |                 |                 |                   |                   |                  |     |                       |                       | X              | Being developed |         |
| Grayson County Coll<br>601 Grayson Dr<br>Denison 75020<br>Joe Shults<br>405/465-6030, ext 271 | Electronics<br>Technology               | X                 |         |             |              | X           | 3                            | MS              | 10+             | F                 | 6                 | 6                | 84  | 13                    |                       | X              |                 |         |
| Lee College<br>PO Box 818<br>Baytown 77520<br>J C Lockett<br>713/427-5611, ext 366            | Electronics<br>Technology               | X                 |         |             |              | X           | 1                            | BS              | 5-<br>10        |                   | 6                 | 3                | 84  |                       |                       |                | Fall            |         |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| TEXAS (continued)<br><br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                         | PROGRAM TITLE                                    | HIGHER OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                              |                 |                 | CONTACT<br>HOURS  |                   | INSTITUTIONAL<br>DATA |     |                 |                       | REMARKS         |
|------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|-----------------------|-----|-----------------|-----------------------|-----------------|
|                                                                                                      |                                                  | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES               | LAB | YR. FIRST OFFER | CURRENT<br>ENROLLMENT |                 |
| Richland Coll<br>12800 Abrams Rd<br>Dallas 75243<br>Harold Albertson<br>214/238-6330                 | Engineering<br>Technology/<br>Robotics<br>Option | X                 |         |             |              | X       | 4           | MS<br>PhD                    | 10+             |                 | 3                 | 3                 | 83                    | 20  |                 | X                     |                 |
| El Paso Comm Coll<br>Box 20500<br>El Paso 79998<br>Diane Katroyer<br>915/594-2197                    |                                                  |                   |         |             |              |         |             |                              |                 |                 |                   |                   |                       |     |                 | X                     | Being developed |
| Brookhaven Coll<br>3939 Valley View Ln<br>Dallas 75234<br>JoAnn Killinger<br>214/620-4822            | Engineering<br>Technology                        | X                 |         |             |              | X       |             |                              |                 |                 |                   |                   |                       |     |                 | X                     | Being developed |
| Mountainview Coll<br>4849 W Illinois Ave<br>Dallas 75211<br>Stan Fulton<br>214/333-8722              | Engineering<br>Technology,<br>Robotics<br>Option | X                 |         |             |              | X       |             |                              |                 |                 |                   |                   |                       |     |                 | X                     | Being developed |
| Texas State Technical<br>Institute-Sweetwater<br>Sweetwater 79556<br>Mr Homer Taylor<br>915/235-8441 | Automated<br>Manufacturing<br>Technology         | X                 |         |             | X            |         | 2           | BS                           | 0-5             | F               | 10                | 20                | 84                    | 40  |                 | X                     |                 |
|                                                                                                      |                                                  |                   |         |             |              |         |             |                              |                 |                 |                   |                   |                       |     |                 |                       |                 |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| UTAH<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                   | PROGRAM TITLE      | DEGREE OFFERED    |         |               |              | PROGRAM     | INSTRUCTORS     |           |                 |                 | CONTACT<br>HOURS  | INSTITUTIONAL<br>DATA |         |     |                 | REMARKS            |                |              |  |
|-----------------------------------------------------------------------------------------------|--------------------|-------------------|---------|---------------|--------------|-------------|-----------------|-----------|-----------------|-----------------|-------------------|-----------------------|---------|-----|-----------------|--------------------|----------------|--------------|--|
|                                                                                               |                    | ASSOC. APPL. SCI. | DIPLOMA | CERTIF. STATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER | SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME     | CLASSES | LAB | YR. FIRST OFFER | CURRENT ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |  |
| Utah Tech Coll at Salt Lake<br>Box 31808<br>Salt Lake City 84131<br>Joe Saker<br>801/967-4235 | Advanced Computers | X                 |         |               |              | X           | 2               | AS<br>BS  | 5-<br>10        |                 | 25                | 10                    | 84      | 30  |                 |                    | X              |              |  |
|                                                                                               |                    |                   |         |               |              |             |                 |           |                 |                 |                   |                       |         |     |                 |                    |                |              |  |



# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| VIRGINIA<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                                | PROGRAM TITLE             | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                              |                 |                 | CONTACT<br>HOURS | INSTITUTIONAL<br>DATA |                   |         |     | REMARKS |                 |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------|---------|-------------|--------------|---------|-------------|------------------------------|-----------------|-----------------|------------------|-----------------------|-------------------|---------|-----|---------|-----------------|
|                                                                                                                                |                           | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL |                  | INSTR. EXPERIENCE     | FULL OR PART TIME | CLASSES | LAB |         | YR. FIRST OFFER |
| Wytheville Comm Coll<br>1000 E Main St<br>Wytheville 24382<br>Dr Y P Hwu<br>703/228-5541                                       | Electronics<br>Technology | X                 |         |             |              | X       |             |                              |                 |                 |                  |                       |                   |         |     | X       | Being developed |
| Tidewater Comm Coll<br>Virginia Beach Campus<br>1700 College Crescent<br>Virginia Beach 23456<br>Dr Jag Mathur<br>804/427-3070 | Electronics               | X                 |         |             |              | X       |             |                              |                 |                 |                  |                       |                   |         |     | X       | Being developed |
| SW Virginia Comm Coll<br>PO Box SVCC<br>Richlands 24641<br>T Hopkins<br>703/964-2555                                           | Electronics               | X                 |         |             |              | X       | 1           | MS 0-5                       |                 | 2               | 1                | 83                    | 22                |         |     | X       | 2 graduates     |
| J Sargeant Reynolds Comm<br>Coll<br>Box 12084<br>Richmond 23241<br>Dr T Diamond                                                |                           |                   |         |             |              |         |             |                              |                 |                 |                  |                       |                   |         |     | X       | Being developed |
|                                                                                                                                |                           |                   |         |             |              |         |             |                              |                 |                 |                  |                       |                   |         |     |         |                 |



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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| WASHINGTON<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                 | PROGRAM TITLE                                                   | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                 |           |                 | CONTACT<br>HOURS |                   | INSTITUTIONAL<br>DATA |         |     |                | REMARKS |                       |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------|---------|-------------|--------------|---------|-------------|-----------------|-----------|-----------------|------------------|-------------------|-----------------------|---------|-----|----------------|---------|-----------------------|
|                                                                                                   |                                                                 | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER | SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL  | INSTR. EXPERIENCE | FULL OR PART TIME     | CLASSES | LAB | YR FIRST OFFER |         | CURRENT<br>ENROLLMENT |
| Renton VoTech Inst<br>3000 NE 4th<br>Renton 98056<br>Emmet Huston<br>206/235-2367                 | Equipment &<br>Maintenance/<br>Rebuild<br>Robotics              |                   | X       |             | X            |         | 1           |                 | 10+       |                 |                  |                   | 82                    | 18      |     | X              |         | 8 graduates           |
| Centralia Coll<br>600 W Locust<br>Centralia 98531<br>B J Butters<br>206/736-9391                  | Electronics                                                     | X                 |         |             |              | X       | 2           | BS              | 10+       |                 | 4                | 2                 | 84                    | 14      |     | X              |         |                       |
| Spokane Comm Coll<br>N 1810 Greene St<br>Spokane 99207<br>Richard Cox<br>509/536-7158             | Computer-<br>Controlled<br>Equipment/<br>Robotics<br>Technician | X                 |         |             | X            |         | 5           | AS              | 10+       |                 | 28               | 13                |                       |         |     | X              |         | Fall 1984             |
| L H Bates VoTech<br>1101 S Yakima Ave<br>Tacoma 98405<br>T George & George Cannan<br>206/597-7233 | Industrial<br>Electronics                                       |                   | X       |             |              | X       | 2           | AS              | 5-<br>10  | F               | 3                | 4+                | 83                    | 30      |     | X              |         |                       |
|                                                                                                   |                                                                 |                   |         |             |              |         |             |                 |           |                 |                  |                   |                       |         |     |                |         |                       |

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# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| WISCONSIN<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                                                            | PROGRAM TITLE                                         | DEGREE OFFERED    |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       |                | REMARKS         |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|----------------|-----------------|
|                                                                                                                             |                                                       | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL |                 |
| Moraine Park Tech Inst<br>Fond Du Lac Campus<br>235 N National Ave<br>Fond Du Lac 54935<br>Keith Draykowski<br>414/922-8611 | Robotics<br>Application &<br>Management<br>Technician | X                 |         |             | X            |             | 1                            | BS              | 5-10            |                   | 2                 | 2                | 83  | 18                    |                       | X              |                 |
| Waukesha County Tech<br>Inst<br>800 Main St<br>Pewaukee 53072<br>Don Krummel<br>414/548-5345                                | Material<br>Handling/<br>Robotics                     |                   |         | X           |              | X           | 4                            | BS              | 5-              |                   | 25                | 22               | 83  | 16                    |                       | X              |                 |
| Milwaukee School of Engr<br>PO Box 644<br>Milwaukee 53201<br>Thomas Davis<br>414/277-7324                                   | Computer-<br>Integrated<br>Manufacturing              |                   |         | X           | X            |             | 1                            | MS              | 5-10            |                   | 2                 | 2                | 81  | 90                    | X                     |                | 60 graduates    |
| Gateway Tech Inst<br>3520 30th Ave<br>Kenosha 53141<br>Stuart Vorpagel<br>414/656-6940                                      | Inst-Elect<br>Mech Tech                               | X                 |         |             |              | X           | 1                            | BS              | 10+             |                   | 5                 | 4                | 83  | 35                    |                       | X              |                 |
| Wisconsin Indianhead<br>VTAE<br>505 Pine Ridge Dr, Box B<br>Shell Lake 54871<br>Howard Sonnenburg<br>715/468-2815           | Electrome-<br>chanical<br>Tech                        | X                 |         | X           |              | X           |                              |                 |                 |                   |                   |                  |     |                       |                       | X              | Being developed |
|                                                                                                                             |                                                       |                   |         |             |              |             |                              |                 |                 |                   |                   |                  |     |                       |                       |                |                 |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY



| WISCONSIN (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                        | PROGRAM TITLE                        | DEGREE OR FIELD   |         |             |              | PROGRAM     |                              | INSTRUCTORS     |                 |                   |                   | CONTACT<br>HOURS |     | INSTITUTIONAL<br>DATA |                       |                |                 | REMARKS |
|-----------------------------------------------------------------------------------------------------|--------------------------------------|-------------------|---------|-------------|--------------|-------------|------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----|-----------------------|-----------------------|----------------|-----------------|---------|
|                                                                                                     |                                      | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER<br>SPECIALTY | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES          | LAB | YR. FIRST OFFER       | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST.    |         |
| Milwaukee Area Tech Coll<br>1015 N 6th St<br>Milwaukee 53203<br>Jose Gonzalez<br>919/278-6696       | Industrial<br>Robotics               |                   | X       |             | X            |             | 1                            | BS              | 10+             |                   | 4                 | 2                | 83  | 19                    |                       | X              |                 |         |
| Western Wisconsin Tech<br>Inst<br>6th & Vine<br>LaCrosse 54602<br>William Welch, Jr<br>608/785-9178 | Electrome-<br>chanical               | X                 |         | X           |              | X           |                              | BS<br>PhD       | 5-<br>10        |                   | 2                 | 4                | 83  | 17                    |                       | X              |                 |         |
| North Central Tech Inst<br>1000 Campus Dr<br>Wausau 54401<br>Marvin Bausman<br>715/675-3331         | Electrome-<br>chanical<br>Technician | X                 |         |             |              | X           | 2                            | AS<br>MS        | 10+             |                   | 5                 | 3                | 83  | 20                    |                       | X              |                 |         |
| Fox Valley Tech Inst<br>Box 2277<br>Appleton 54913<br>Virgil Noordyle<br>414/735-5783               | Electrome-<br>chanical<br>Technology | X                 |         |             |              | X           | 4                            | MS              | 5-<br>10        |                   | 4                 | 4                | 79  | 25                    |                       | X              | 40 graduates    |         |
| Blackhawk Tech Inst<br>Box 5009<br>Jonesville 53547<br>Gene Hilst<br>608/756-4121                   | Electrome-<br>chanical<br>Technology | X                 |         |             |              | X           | 3                            | MS              | 10+             |                   | 6                 | 4                | 84  | 16                    |                       | X              |                 |         |
| Lakeshore Tech Inst<br>1290 North Ave<br>Cleveland 53015<br>Mel DeSwarte<br>414/684-4408            | Electrome-<br>chanical<br>Technology | X                 |         | X           |              | X           |                              |                 |                 |                   |                   |                  |     |                       |                       | X              | Being developed | 1       |

# ROBOTICS / AUTOMATED SYSTEMS TECHNICIAN TRAINING SUMMARY

| WISCONSIN (continued)<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                                         | PROGRAM TITLE             | DEGREE OFFERED    |         |             |              | PROGRAM | INSTRUCTORS |                 |                 |                 | CONTACT<br>HOURS  | INSTITUTIONAL<br>DATA |         |     |                 | REMARKS               |                |              |  |
|------------------------------------------------------------------------------------------------------|---------------------------|-------------------|---------|-------------|--------------|---------|-------------|-----------------|-----------------|-----------------|-------------------|-----------------------|---------|-----|-----------------|-----------------------|----------------|--------------|--|
|                                                                                                      |                           | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE |         | INDEPENDENT | PART OF ANOTHER | NUMBER REQUIRED | EDUCATION LEVEL | INSTR. EXPERIENCE | FULL OR PART TIME     | CLASSES | LAB | YR. FIRST OFFER | CURRENT<br>ENROLLMENT | PRIVATE SCHOOL | PUBLIC INST. |  |
| Wisconsin Indianhead<br>Tech Inst<br>600 N 21st<br>Superior 54880<br>Raymond Johnson<br>715/394-6677 | Electronics<br>Technology | X                 |         |             |              |         | X           | 3               | BS              | 0-5             |                   | 4                     | 6       | 83  | 90              |                       | X              |              |  |
|                                                                                                      |                           |                   |         |             |              |         |             |                 |                 |                 |                   |                       |         |     |                 |                       |                |              |  |





| WYOMING<br>SCHOOL &<br>ROBOTICS<br>COORDINATOR                              | PROGRAM TITLE | IS CHIEF OFFICER? |         |             |              |             |                           |                 |                    | PROGRAM           |                   | INSTRUCTORS |     | CONTACT HOURS   |                    | INSTITUTIONAL DATA |              | REMARKS |
|-----------------------------------------------------------------------------|---------------|-------------------|---------|-------------|--------------|-------------|---------------------------|-----------------|--------------------|-------------------|-------------------|-------------|-----|-----------------|--------------------|--------------------|--------------|---------|
|                                                                             |               | ASSOC. APPL. SCI. | DIPLOMA | CERTIFICATE | SHORT COURSE | INDEPENDENT | PART OF ANOTHER SPECIALTY | NUMBER REQUIRED | EDUCATION REQUIRED | INSTR. EXPERIENCE | FULL OR PART TIME | CLASSES     | LAB | YR. FIRST OFFER | CURRENT ENROLLMENT | PRIVATE SCHOOL     | PUBLIC INST. |         |
| Casper Coll<br>125 College Dr<br>Casper 82601<br>H M Dinges<br>307/268-2600 | Electronics   | X                 |         |             |              | X           | 1                         | BS              | 5-10               |                   | 3                 | 4           | 83  | 10              |                    | X                  |              |         |

APPENDIX C  
BIBLIOGRAPHY

|                                                                                                                                              | NUMBER OF<br>SCHOOLS | COMPETENCY<br>BASED |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|
| Asfahl, C.R. <u>Robotics and Manufacturing Automation</u> .<br>New York: John Wiley & Sons, 1984.                                            | 2                    |                     |
| Bondi and Robino, <u>Robotic Applications for Pneumatics<br/>and Hydraulics</u> . Arlington Heights, IL: Amptron-<br>ics, 1983.              | 1                    |                     |
| Brady. <u>Robot Motion</u> . Cambridge, MA: MIT Press, 1983.                                                                                 | 1                    |                     |
| Brown, C.M. and Ballard, D.H. <u>Computer Vision</u> . Engle-<br>wood Cliffs, NJ: Prentice-Hall, Inc., 1982.                                 | 1                    |                     |
| Cassell, D. <u>Microcomputers and Modern Control Engineer-<br/>ing</u> . Englewood Cliffs, NJ: Prentice-Hall, Inc.,<br>1983.                 | 1                    |                     |
| Chmiekwski, T., Klatter, R.; Negin, M. <u>Robotics: An<br/>Integrated Approach to the Technology</u> . New York:<br>John Wiley & Sons, 1984. | 1                    |                     |
| Dorf, R.C. <u>Robots and Automated Manufacturing</u> . Reston,<br>VA: Reston, 1983.                                                          | 14                   |                     |
| Engleberger, J. <u>Robotics in Practice</u> , AMA COM, 1980.                                                                                 | 12                   |                     |
| Goetsch, D.L. <u>CAD/CAM Workbook</u> . S.W. Publishers, 1983.                                                                               | 1                    |                     |
| Grover, Mikell P. <u>Automation, Production Systems and<br/>CAM</u> . Englewood Cliffs, NJ: Prentice-Hall, Inc.,<br>1980.                    | 1                    |                     |
| Hall, D.V. <u>Microprocessor and Digital Systems</u> . New<br>York: McGraw-Hill Book Co., Inc., 1980.                                        | 1                    |                     |
| Heath, L. <u>Robotics - Theory and Application of Indus-<br/>trial and Educational Robots</u> . Reston, VA: Reston<br>Publishers.            | 3                    |                     |
| Holland, V.M. <u>Basic Robotic Concepts</u> . Indianapolis,<br>IN: Howard W. Sams, 1983.                                                     | 1                    |                     |
| Hunt, V.D. <u>Industrial Robotics Handbook</u> . New York:<br>Industrial Press, 1983.                                                        | 1                    |                     |
| <u>Industrial Robots, Vo. I &amp; II</u> . 2nd ed. Dearborn, MI:<br>Society of Manufacturing Engineers, 1983.                                | 4                    |                     |

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2nd ed. New York: John Wiley & Sons, 1982.

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puter-Aided Design and Computer-Aided Manufactur-  
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vices & Systems. Englewood Cliffs, NJ: Prentice-  
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and Control. Cambridge, MA: MIT Press, 1981.

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Applications.

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Corinthian Press, 1982.

Tompkins and White. Facilities Planning. New York:  
John Wiley & Sons, 1984.

Understanding Electronic Control of Automation. TI  
Learning Center.

| NUMBER OF<br>SCHOOLS | COMPETENCY<br>BASED |
|----------------------|---------------------|
| 1                    |                     |
| 1                    |                     |
| 8                    |                     |
| 1                    |                     |
| 1                    |                     |
| 1                    |                     |
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| 3                    |                     |
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| 1                    |                     |

This Bibliography is as complete as possible. Book titles were checked in Books in Print; several books are not listed in the 83-84 edition.

NOTE: Heath/Zenith and Society of Manufacutring Engineers textbooks were also identified but not listed by specific titles.

## APPENDIX D

## COLLEGES AND UNIVERSITIES OFFERING ROBOTICS TRAINING

| SCHOOL/<br>ROBOTICS<br>CONTACT<br>PERSON                                                                                      |      |      |      |      |      |      |               |               |                |       | REMARKS                            |
|-------------------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|------|---------------|---------------|----------------|-------|------------------------------------|
|                                                                                                                               | BSME | MSME | BSIE | MSIE | BSEE | MSEE | MS Mfg. Engr. | BS Ind. Tech. | BS Engr. Tech. | OTHER |                                    |
| University of Arkansas<br>Fayetteville, AR 72701<br>William Rader<br>501/575-3156                                             | X    | X    | X    | X    |      |      |               |               |                |       |                                    |
| California Poly State University<br>San Luis Obispo, CA 93407<br>Dr Donald Morgan<br>805/546-2341                             |      |      | X    |      |      |      |               |               |                |       |                                    |
| Cogswell Polytechnical College<br>600 Stockton St<br>San Francisco, CA 94108<br>Edwin Merrick<br>415/433-5550                 | X    |      |      |      |      |      |               |               |                |       |                                    |
| University of Southern California<br>SAL-300, MC-0781<br>Los Angeles, CA 90089<br>Barry Soroka<br>213/743-5535                |      |      |      | X    |      |      |               |               |                |       |                                    |
| California State University, Los Angeles<br>5151 State University Dr<br>Los Angeles, CA 90032<br>Dr Ram Manvi<br>213/224-3541 | X    |      |      |      |      |      |               |               |                |       |                                    |
| University of California, Davis<br>Davis, CA 95616<br>Dr T C Hsia<br>916/752-1443                                             |      |      |      |      |      |      |               |               | X              |       | MS, Robotics/Automation            |
| California State University<br>6000 I St<br>Sacramento, CA 95825<br>Dr Mohammad Zano<br>916/454-7336                          |      |      |      |      |      |      |               |               | X              |       | MS, Robotics/Automation            |
| University of California at Los Angeles<br>405 Hilgard Ave<br>Los Angeles, CA 90024<br>Dr Watteau<br>213/206-8525             |      |      |      |      |      | X    |               |               | X              |       | BS, PhD, Manufacturing Engineering |
| San Francisco State University<br>1600 Holloway Ave<br>San Francisco, CA<br>Prof W Stadler<br>415/469-1386                    |      |      |      |      |      |      |               |               | X              |       | BS, Robotics                       |

# COLLEGES AND UNIVERSITIES OFFERING ROBOTICS TRAINING

| SCHOOL/<br>ROBOTICS<br>CONTACT<br>PERSON                                                                               |      |      |      |      |      |      |               |               |                            |       | REMARKS                            |
|------------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|------|---------------|---------------|----------------------------|-------|------------------------------------|
|                                                                                                                        | BSME | MSME | BSIE | MSIE | BSEE | MSEE | MS Mfg. Engr. | BS Ind. Tech. | B <sup>2</sup> Engr. Tech. | OTHER |                                    |
| Colorado State University<br>Fort Collins, CO 80523<br>F W Smith<br>303/491-8655                                       | X    | X    | X    | X    |      |      |               |               |                            | X     | BS, MS, Computer Engineering       |
| University of Hartford<br>West Hartford, CT 06117<br>Prof Hemond<br>203/243-4786                                       | X    |      |      |      |      |      |               |               |                            |       |                                    |
| University of Delaware<br>Newark, DE 19716<br>Dr. A Kumar<br>302/451-2889                                              | X    | X    |      |      |      |      |               |               |                            |       |                                    |
| Florida A & M University<br>307 Tech Unit A<br>Tallahassee, FL 32307<br>Barry McConnell<br>904/599-3022                |      |      |      |      |      |      |               |               | X                          |       | BS, Robotics & Undersea Technology |
| University of Florida<br>Department of Electrical Engineering<br>Gainesville, FL 32611<br>Dr Del Tesar<br>904/392-0814 |      |      |      |      | X    | X    |               |               |                            |       |                                    |
| University of South Florida<br>4202 Fowler Ave<br>Tampa, FL 33620<br>D L Kimbler<br>813/974-2269                       |      |      |      |      |      |      | X             |               |                            |       |                                    |
| Florida Atlantic University<br>Boca Raton, FL 33431<br>Yacov Shamash<br>305/393-3412                                   |      |      |      |      | X    | X    |               |               | X                          |       | BS, MS, Computer Engineering       |
| University of Central Florida<br>Box 25000<br>Orlando, FL 32816<br>John Biegel<br>305/275-2615                         |      |      |      |      |      |      | X             |               |                            |       |                                    |
| University of Miami<br>Coral Gables, FL 33124<br>Dr David Sumanth<br>305/784-2344                                      |      |      | X    | X    |      |      |               |               |                            |       |                                    |
|                                                                                                                        |      |      |      |      |      |      |               |               |                            |       |                                    |

# COLLEGES AND UNIVERSITIES OFFERING ROBOTICS TRAINING

| SCHOOL/<br>ROBOTICS<br>CONTACT<br>PERSON                                                                          |      |      |      |      |      |      |            |               |               |                             | REMARKS |
|-------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|------|------------|---------------|---------------|-----------------------------|---------|
|                                                                                                                   | BSME | MSME | BSIE | MSIE | BSEE | MSIE | MS ME Eng. | BS Ind. Tech. | BS Eng. Tech. | OTHER                       |         |
| Georgia Tech<br>Atlanta, GA 30332<br>Wayne Book<br>404/894-3247                                                   |      |      |      |      |      |      |            |               | X             | MS, CIM                     |         |
| University of Illinois<br>1513 University Ave<br>Urbana, IL 61801<br>Shiv Kapoor<br>217/333-3432                  | X    | X    | X    | X    |      |      |            |               |               |                             |         |
| Southern Illinois University<br>Technology Building D<br>Carbondale, IL 62901<br>Dr John McLuckie<br>618/536-3396 |      |      |      |      |      |      | X          | X             |               |                             |         |
| Northwestern University<br>Evanston, IL 60201<br>Prof C H Wu<br>312/492-5066                                      |      |      |      |      |      | X    |            |               |               |                             |         |
| Millican University<br>1184 W Main<br>Decatur, IL 62522<br>J R Gross<br>217/424-6338                              |      |      | X    |      |      |      |            |               |               |                             |         |
| Indiana State Technical University<br>Terre Haute, IN 47802<br>Dr Larry Heath<br>812/232-6311                     |      |      |      |      |      |      |            |               | X             | BS, Computer Engineering    |         |
| Purdue University<br>Lafayette, IN 47907<br>H L Banton<br>317/494-7514                                            | X    |      |      |      |      |      |            |               |               |                             |         |
| Indiana-Purdue University<br>2101 Coliseum Blvd<br>Fort Wayne, IN 46805<br>Donald McAleece<br>219/482-5359        | X    |      |      |      |      |      |            |               |               |                             |         |
| ITT Technical Institute<br>9511 Angola Ct<br>Indianapolis, IN 46268<br>Milton Kalapach<br>317/875-8640            |      |      |      |      |      |      |            |               | X             | Bachelor of Applied Science |         |
|                                                                                                                   |      |      |      |      |      |      |            |               |               |                             |         |

# COLLEGES AND UNIVERSITIES OFFERING ROBOTICS TRAINING

| SCHOOL/<br>ROBOTICS<br>CONTACT<br>PERSON                                                             |      |      |      |      |      |      |               |               |                |       | REMARKS                 |
|------------------------------------------------------------------------------------------------------|------|------|------|------|------|------|---------------|---------------|----------------|-------|-------------------------|
|                                                                                                      | BSME | MSME | BSIE | MSIE | BSEE | MSEE | MS Mfg. Engr. | BS Ind. Tech. | BS Engr. Tech. | OTHER |                         |
| ITT Technical Institute<br>1415 Profit Dr<br>Fort Wayne, IN 46808<br>Dr Ed Kimble<br>219/484-4107    |      |      |      |      |      |      |               |               | X              |       | BS, Robotics/Automation |
| Iowa State University<br>Ames, IA 50011<br>Eric Malstrom<br>515/294-1682                             |      |      | X    | X    |      |      |               |               |                |       |                         |
| Cowley County Community College<br>Arkansas City, KS 67005<br>Don Hughes<br>316/442-0430             |      |      |      |      | X    |      |               |               |                |       |                         |
| University of Louisville<br>Louisville, KY 49292<br>Herman Leep<br>502/588-6342                      |      |      |      | X    |      |      |               |               |                |       |                         |
| Eastern Kentucky University<br>Richmond, KY 40475<br>James Maslusno<br>606/622-3232                  |      |      |      |      |      |      | X             |               |                |       |                         |
| Morehead State University<br>UP0 774<br>Morehead, KY 40351<br>Robert Newton<br>606/783-2419          |      |      |      |      |      |      |               |               | X              |       | BS, Robotics/Automation |
| Louisiana Tech<br>Ruston, LA 71272<br>Robert Warrington, Jr<br>318/257-2357                          | X    | X    |      |      |      |      |               |               |                |       |                         |
| Louisiana State University<br>3128 CEBA<br>Baton Rouge, LA 70803<br>Dr William Biles<br>504/388-5112 |      |      | X    | X    |      |      |               |               |                |       |                         |
| United States Naval Academy<br>Annapolis, MD 21402<br>Dr Knowles<br>301/267-3468                     |      |      |      |      |      |      |               |               | X              |       | BS, Weapons & Systems   |
|                                                                                                      |      |      |      |      |      |      |               |               |                |       |                         |

# COLLEGES AND UNIVERSITIES OFFERING ROBOTICS TRAINING

| SCHOOL/<br>ROBOTICS<br>CONTACT<br>PERSON                                                                        |      |      |      |      |      |       |              |               |               |       | REMARKS |
|-----------------------------------------------------------------------------------------------------------------|------|------|------|------|------|-------|--------------|---------------|---------------|-------|---------|
|                                                                                                                 | BSME | MSME | BSIE | MSIE | BSEE | MSIEE | MS Mfg. Eng. | BS Ind. Tech. | BS Eng. Tech. | OTHER |         |
| University of Massachusetts<br>Amherst, MA 01003<br>Dr L E Murch<br>413/545-2253                                | X    |      |      |      |      | X     |              |               |               |       |         |
| Southeastern Massachusetts University<br>North Dartmouth, MA 02747<br>Gilbert Fain<br>617/999-8476              |      |      |      | X    | X    |       |              |               |               |       |         |
| Michigan Tech University<br>Houghton, MI 49931<br>M Deiseuroth<br>906/487-2551                                  | X    | X    |      |      |      |       |              |               |               |       |         |
| Lake Superior State College<br>Sault Sainte Marie, MI 49783<br>James DeVault<br>906/635-2597                    |      |      |      |      |      |       |              | X             |               |       |         |
| Western Michigan University<br>Kohrman Hall<br>Kalamazoo, MI 49008<br>Fred Sitkins<br>616/383-4992              |      |      |      |      |      |       |              | X             |               |       |         |
| Eastern Michigan University<br>104 Sill Hall<br>Ypsilanti, MI 48197<br>Robert Parent<br>313/487-2040            |      |      |      |      |      |       | X            |               |               |       |         |
| GMI Engineering & Management Institute<br>1700 West Third<br>Flint, MI 48502<br>Jack Lane<br>313/762-7877       | X    |      |      |      |      |       |              |               |               |       |         |
| Michigan State University<br>College of Engineering<br>East Lansing, MI 48824<br>Dr R L Tummala<br>517/355-7453 |      |      |      | X    | X    |       |              |               |               |       |         |
| University of Michigan, Dearborn<br>Dearborn, MI 48128<br>Dr A Asward<br>313/593-5080                           |      |      | X    | X    |      |       |              |               |               |       |         |
|                                                                                                                 |      |      |      |      |      |       |              |               |               |       |         |

# COLLEGES AND UNIVERSITIES OFFERING ROBOTICS TRAINING

| SCHOOL/<br>ROBOTICS<br>CONTACT<br>PERSON                                                                        |      |      |      |      |      |      |               |               |                |        | REMARKS |
|-----------------------------------------------------------------------------------------------------------------|------|------|------|------|------|------|---------------|---------------|----------------|--------|---------|
|                                                                                                                 | BSME | MSME | BSIE | MSIE | BSEE | MSIE | MS Mfg. Engr. | BS Ind. Tech. | BS Engr. Tech. | OT-HER |         |
| University of Mississippi<br>University, MS 38677<br>Dr C E Smith<br>601/232-7231                               |      |      |      | X    |      |      |               |               |                |        |         |
| University of Mississippi<br>Box 5172, So Station<br>Hattiesburg, MS 39406-5172<br>J W Lipscomb<br>601/266-4902 |      |      |      |      |      |      | X             |               |                |        |         |
| University of Missouri, Rolla<br>Rolla, MO 65401<br>R T Johnson<br>314/341-4614                                 | X    |      |      |      |      |      |               |               |                |        |         |
| University of Missouri<br>Truman Engineering Labs<br>Independence, MO 64050<br>Dr S K Blundell<br>816/254- 663  | X    | X    |      |      |      |      |               |               |                |        |         |
| Farleigh Dickenson University<br>1000 River Road<br>Teaneck, NJ 07666<br>Dr Rivin<br>201/692-2725               | X    |      |      |      |      |      |               |               |                |        |         |
| SUNY College of Technology<br>811 Count St<br>Utica, NY 13502<br>Prof Atlas Hsie<br>315/792-3542                |      |      |      |      |      |      |               | X             |                |        |         |
| Columbia University<br>234 SW Mudd<br>New York, NY 10027<br>C Klein<br>212/280-2955                             |      | X    |      |      |      |      |               |               |                |        |         |
| Clarkston University<br>Potsdam, NY 13676<br>Dean E Misiaszek<br>315/268-6555                                   | X    | X    |      |      | X    | X    |               |               |                |        |         |
| RPI<br>Troy, NY 12181<br>Dr Stephen Derby<br>518/266-6991                                                       | X    | X    |      |      |      |      | X             |               |                |        |         |
|                                                                                                                 |      |      |      |      |      |      |               |               |                |        |         |

# COLLEGES AND UNIVERSITIES OFFERING ROBOTICS TRAINING

| SCHOOL/<br>ROBOTICS<br>CONTACT<br>PERSON                                                               | BSME | MSME | BSIE | MSIE | BSEE | MSEE | MS ME-Eng. | BS Ind. Tech. | BS Engr. Tech. | OTHER           | REMARKS |
|--------------------------------------------------------------------------------------------------------|------|------|------|------|------|------|------------|---------------|----------------|-----------------|---------|
| Duke University<br>Durham, NC 27706<br>Prof Paul Wang<br>919/684-3123                                  |      |      |      |      | X    | X    |            |               |                |                 |         |
| North Carolina State University<br>Raleigh, NC 27695-7911<br>W Snyder<br>919/737-2336                  |      |      |      |      | X    | X    |            |               |                |                 |         |
| University of Toledo<br>2801 Bancroft St<br>Toledo, OH 43606<br>Dr R J McNichols<br>419/537-2412       | X    |      | X    |      | X    | X    |            |               |                |                 |         |
| Ohio University<br>Athens, OH 45701<br>R A Lawrence<br>614/594-5862                                    | X    | X    |      |      |      |      | X          |               |                |                 |         |
| University of Cincinnati<br>ML 72<br>Cincinnati, OH 45242<br>Ernest Hall<br>513/475-5067               | X    | X    | X    | X    |      |      |            |               |                |                 |         |
| University of Oklahoma<br>Suite 124, 202 West Boyd<br>Norman, OK 73019<br>A Ravindran<br>405/325-3721  |      |      | X    | X    |      |      |            |               |                |                 |         |
| Carnegie-Mellon University<br>Pittsburgh, PA 15213<br>Paul Wright<br>412/578-3529                      |      | X    |      |      |      |      |            |               |                |                 |         |
| Swarthmore College<br>Swarthmore, PA 19081<br>Frederick Orthlieb<br>215/447-7080                       |      |      |      |      |      |      |            |               | X              | BS, Engineering |         |
| Drexel University<br>32nd and Chestnut<br>Philadelphia, PA 19104<br>Dr Richard Klafter<br>215/895-2220 |      |      |      |      |      | X    |            |               |                |                 |         |
|                                                                                                        |      |      |      |      |      |      |            |               |                |                 |         |

# COLLEGES AND UNIVERSITIES OFFERING ROBOTICS TRAINING

| SCHOOL/<br>ROBOTICS<br>CONTACT<br>PERSON                                                                    |      |      |      |      |      |      |               |               |                |                           | REMARKS |
|-------------------------------------------------------------------------------------------------------------|------|------|------|------|------|------|---------------|---------------|----------------|---------------------------|---------|
|                                                                                                             | BSME | MSME | BSIE | MSIE | BSEE | MSEE | MS Mfg. Engr. | BS Ind. Tech. | BS Engr. Tech. | OTHER                     |         |
| University of Rhode Island<br>College of Engineering<br>Kingston, RI 02881<br>Robert Kelley<br>401/792-2514 | X    | X    | X    | X    | X    | X    |               |               |                |                           |         |
| South Carolina State College<br>Orangeburg, SC 29117<br>Uttam Makhopadhyay<br>803/536-7117                  |      |      |      |      |      |      |               | X             |                |                           |         |
| Clemson University<br>Clemson, SC 29631<br>F W Paul<br>803/656-3291                                         |      | X    |      |      |      |      |               |               |                |                           |         |
| University of South Carolina<br>Columbia, SC 29208<br>Ronald Bonnell<br>803/777-4311                        |      |      |      |      | X    | X    |               |               |                |                           |         |
| Northern State College<br>Aberdeen, SD 57401<br>Dr Terry Richardson<br>605/622-2571                         |      |      |      |      |      |      | X             |               |                |                           |         |
| South Dakota School of Mines & Technology<br>Rapid City, SD 57701<br>Dan Dolan<br>605/394-2409              | X    | X    |      |      |      |      |               |               |                |                           |         |
| Texas A & M University<br>College Station, TX 77843<br>G Peterson<br>409/845-4951                           |      |      |      |      |      |      |               | X             |                |                           |         |
| University of Houston<br>4800 Calhoun<br>Houston, TX 77004<br>Bill Drake<br>713/749-4652                    |      |      |      |      |      |      |               |               | X              | BS, Mechanical Technology |         |
| University of Texas<br>Austin, TX 78712<br>A E Traver<br>512/471-3059                                       | X    | X    |      |      |      |      |               |               |                |                           |         |
|                                                                                                             |      |      |      |      |      |      |               |               |                |                           |         |

# COLLEGES AND UNIVERSITIES OFFERING ROBOTICS TRAINING

| SCHOOL/<br>ROBOTICS<br>CONTACT<br>PERSON                                                                               |      |      |      |      |      |      |               |               |                |       | REMARKS                   |
|------------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|------|---------------|---------------|----------------|-------|---------------------------|
|                                                                                                                        | BOME | MSME | BSIE | MSIE | BSEE | MSEE | MS Mfg. Engr. | BS Ind. Tech. | BS Engr. Tech. | OTHER |                           |
| Brigham Young University<br>242 P Clyde Bldg<br>Provo, UT 84601<br>Edward Red<br>801/378-5539                          |      | X    |      |      |      |      |               |               |                |       |                           |
| Webster State College<br>MS 1802<br>Ogden, UT 84408<br>Roy Thornock                                                    |      |      |      |      |      | X    |               |               |                |       |                           |
| University of Vermont<br>Voter Building<br>Burlington, VT 05405<br>Prof B vonTurkovich<br>802/656-3320                 | X    |      |      |      |      |      |               |               |                |       |                           |
| Old Dominion University<br>Norfolk, VA 23508<br>Alok Verma<br>804/440-4644                                             |      |      |      |      |      |      |               |               | X              |       | BS, Mechanical Technology |
| West Virginia University<br>Morgantown, WV 26506<br>John Sneckenberger<br>304/293-3111                                 | X    | X    |      |      |      |      |               |               |                |       |                           |
| West Virginia Institute of Technology<br>312 Davis Hall, WVIT<br>Montgomery, WV 25136<br>William Burns<br>304/442-3189 |      |      |      |      |      |      | X             |               |                |       |                           |
| University of Wisconsin, Stout<br>FH 215<br>Menomonie, WI 54751<br>LA Schneider<br>715/235-6323                        |      |      |      |      |      | X    |               |               |                |       |                           |
| University of Wisconsin, Madison<br>1513 University Avenue<br>Madison, WI 53706<br>M F DeVries<br>608/262-0921         |      |      |      |      |      | X    |               |               |                |       |                           |
|                                                                                                                        |      |      |      |      |      |      |               |               |                |       |                           |